REPORT RESUMES

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NONFARM AGRICULTURAL EMPLOYMENT IN NORTHEAST LOUISIANA--AREA II--WITH IMPLICATIONS FOR DEVELOPING TRAINING PROGRAMS.

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LOUISIANA ST. UNIV., BATON ROUGE
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DESCRIPTORS- *OFF FARM AGRICULTURAL OCCUPATIONS, *EMPLOYMENT OPPORTUNITIES, *EDUCATIONAL NEEDS, *OCCUPATIONAL SURVEYS, *EMPLOYMENT QUALIFICATIONS, AGRICULTURAL SKILLS, OCCUPATIONAL CLUSTERS, LOUISIANA,

AS PART OF A STATEWIDE STUDY OF NONFARM AGRICULTURAL OCCUPATIONS IN LOUISIANA, 480 FIRMS IN 14 PARISHES WERE SURVEYED TO DETERMINE THE NUMBER OF EMPLOYEES, THE AGRICULTURAL COMPETENCIES NEEDED, AND JOB CHARACTERISTICS. OF THE 6,087 EMPLOYEES, 3,119 NEEDED AGRICULTURAL COMPETENCIES IN 597 DIFFERENT JOB TITLES. NEARLY 60 PERCENT OF THE EMPLOYEES WERE IN CROPS, FORESTRY, AND SOIL CONSERVATION. A 12.5 PERCENT INCREASE IN EMPLOYMENT OF WORKERS WITH AGRICULTURAL COMPETENCIES WAS EXPECTED WITHIN 5 YEARS. THE MOST SIGNIFICANT INCREASE IS EXPECTED IN FARM MACHINERY SALES AND SERVICE. MORE PEOPLE WERE EMPLOYED AT THE SEMISKILLED LEVEL THAN AT ANY OTHER. EMPLOYERS PREFERRED THAT (1) 83.5 PERCENT OF THE EMPLOYEES HAVE AT LEAST A HIGH SCHOOL EDUCATION, (2) 8.8 PERCENT HAVE SOME COLLEGE, (3) 12.4 PERCENT HAVE COMPLETED COLLEGE, AND (4) 37.5 PERCENT HAVE A BACHELOR OF SCIENCE DEGREE OR MORE. EMPLOYERS ALSO PREFERRED A FARM RESIDENTIAL BACKGROUND FOR 54.8 PERCENT OF THE EMPLOYEES. THE GREATEST NEED FOR EMPLOYEE FAMILIARITY WITH AGRICULTURAL SUBJECTS WAS IN THE MANAGERIAL, SUPERVISORY, SALES, AND SKILLED LEVELS. OTHER FINDINGS CONCERN OCCUPATIONAL FAMILIES, EMPLOYMENT LEVELS, AGE, SALARY, EDUCATIONAL REQUIREMENTS, RESIDENTIAL BACKGROUND, AND EMPLOYMENT EXPERIENCE. FOURTEEN RECOMMENDATIONS SUGGEST CURRICULUM CONTENT. THE SURVEY INSTRUMENT, A LIST OF BUSINESSES INTERVIEWED, AND A LIST OF JOB TITLES WITH NUMBER OF WORKERS IN EACH ARE INCLUDED. OTHER PARTS OF THE STATEWIDE STUDY ARE AVAILABLE AS VT 004 782-VT 004 786. (JM)

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NONFARM AGRICULTURAL EMPLOYMENT IN NORTHEAST LOUISIANA — AREA II — WITH IMPLICATIONS FOR DEVELOPING TRAINING PROGRAMS

Cooperative Research Project
OE 5-85-040

480	Nonfarm Agricultural Businesses
6,087	Employees
3,119	Workers with Agri. Competencies
597	Job Titles

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School of Vocational Education
College of Agriculture
Louisiana State University
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C. M. Curtis
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DEPARTMENT OF VOCATIONAL AGRICULTURAL EDUCATION

SCHOOL OF VOCATIONAL EDUCATION

COLLEGE OF AGRICULTURE

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June, 1967

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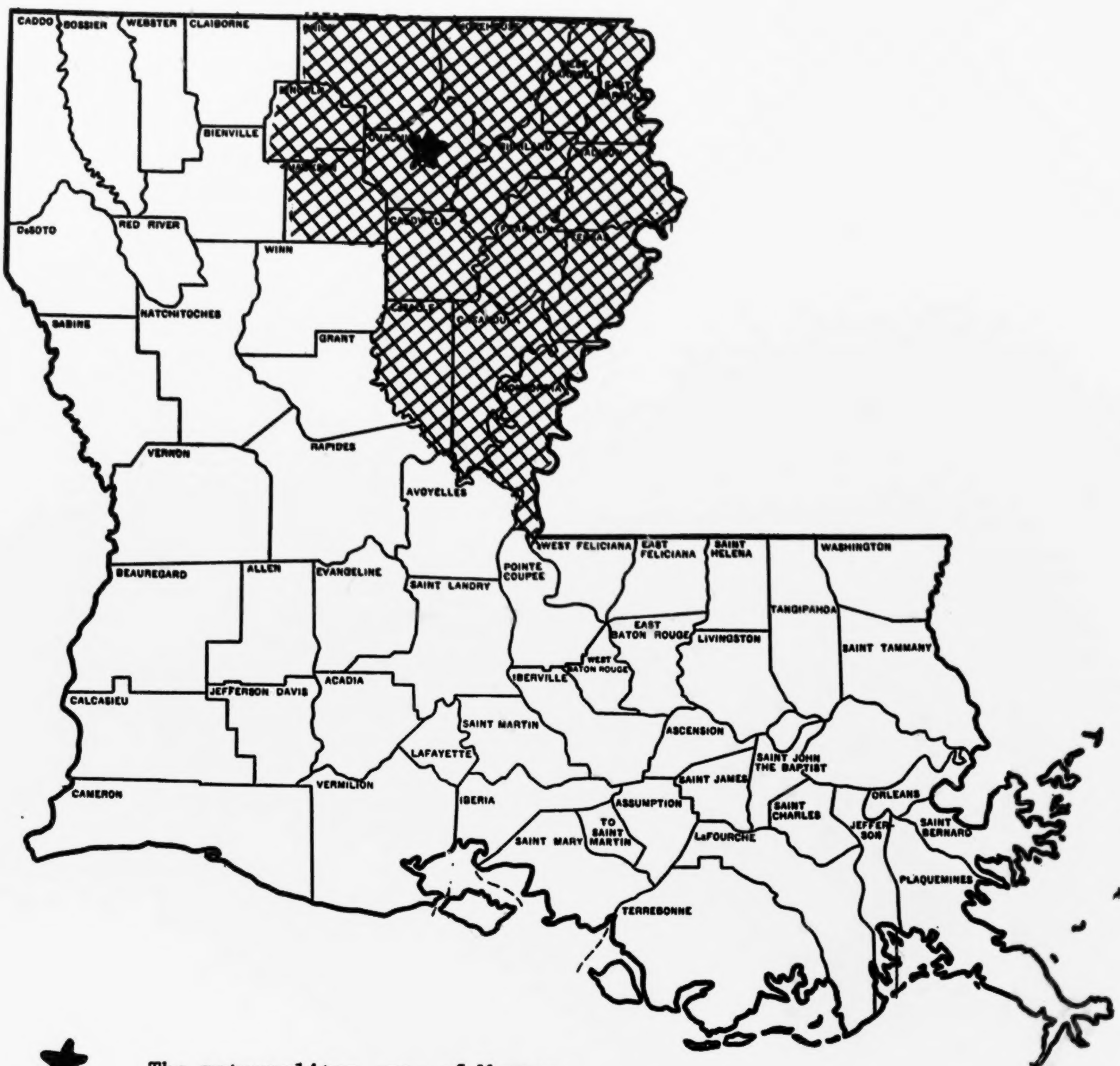
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ORLEANS
SAINT CHARLES
TO SAINT MARTIN
SAINT MARY
LaFOURCHE
JEFFERSON
SAINT BERNARD
PLAQUEMINES
TERREBONNE

★ The metropolitan area of Monroe-
West Monroe is excluded in this study

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INTRODUCTION

The male adult in today's society spends more time at work than in any other activity. Choosing an occupation is among the most important decisions he makes, for his contribution to family and society depends upon a job he likes and can do well.

Today, choosing an occupation is a different kind of problem than that faced by earlier generations. Actually, the problem differs with each generation. In 1910 about 30 of every 100 workers earned a living as farmers. Now only 6 of every 100 can be classed as farmers, or farm laborers.

Much of the traditional work once performed on the farm is now accomplished in towns and cities where numerous and varied segments of agriculture have developed for processing and distributing farm products, along with giving aid to farmers with their production problems.

Tremendous changes have occurred in the kind and location of occupations contained in agriculture, as more of its processes move from farm to city and the farmer requires more help from off-farm sources.

More people realize today that agriculture is no longer as simple as it was at the turn of the century. However, few people understand the complexity of agriculture and appreciate the scope of the occupational opportunities it offers to youth. Agriculture is made up of much more than farming. It includes the provision of supplies and technical services for those who produce farm products, and it includes processing and marketing farm products. Farming is only one phase of agriculture. It is the basic segment, with processing, marketing, and service occupations growing out of it. Agriculture is not, therefore, a single occupation, rather it is made up of sectors of occupations separated as production, marketing, processing, and services. Farming is now defined as "production" agriculture. Marketing, processing, technical services and supplies are correlated industries commonly accepted throughout the country as "nonfarm" agriculture. Eighty per cent of the total work force in agriculture is engaged in nonfarm agricultural work Persons employed in many of these industries, businesses, services and agencies need competencies in agriculture.

The demand for workers in agricultural occupations is based upon and proportional to the production agricultural outputs in a state or region.

The total economy of Area II -- the 15 parish area in Northeast Louisiana covered by this report -- is geared to production agriculture. Production agriculture has brought various types of correlated industries to this area which add to the agricultural backbone. Agricultural production requires an ever increasing flow of supplies, machinery and services. Throughout the area one will find cotton gins geared to the mechanized equipment being used in harvesting. Grain elevators, seed cleaning plants, cotton compresses, poisoning and fertilizing firms, tractor and implement dealers, equipment manufacturing plants, cotton buyers and brokers, seed and fertilizer stores and sweet potato storage and processing plants are strategically located throughout the area to serve the needs of the crop producers. In addition there are auction sales, feed mills, feed and supply stores, hatcheries, creameries, slaughter houses, curing plants and packing companies, as correlated industries to livestock production. Repair shops, sheet metal shops, welding service, flying service, and many other similar organizations serve the farmer and agriculture. Agriculture is big business in this rich area of Northeast Louisiana.

Jobs and opportunity for employment are closely related to the geography and the economy of a region. Nonfarm agriculture in this area affords a wide variety of jobs for farm boys desiring a career in fields related to farming. Rural boys are particularly suited to work offered by this complex, because of their rural and farm background. Specific training gained in high school, plus this background of experiences, give the qualifications required of workers who deal with rural and farm people. This supports the premise that there is a relationship between occupational direction and childhood experiences.

Before the individual becomes involved in the world of work he must make a decision or a series of decisions regarding the occupation he expects to follow. Occupational information helps a person get a clear picture of the job situation within the community where he expects to work. This information should enable him to make rational decisions concerning the selection of an occupation.

In Louisiana a massive effort has been made to identify nonfarm agricultural businesses and agencies, together with the qualifications of workers they employ. Excluding Monroe and West Monroe, this report covers findings for Area II, an area designated by the State Department of Education as a supervisory area for vocational agriculture. The Monroe-West Monroe area was surveyed and the report included in publications covering metropolitan areas of Louisiana. Hereafter, when Area II is mentioned, it is to be understood that Monroe and West Monroe are excluded.

There are 94 high schools in Area II of which 63 have vocational agriculture departments. Vocational agriculture in these high schools has served two distinct groups of people -- those already on the farm, and those preparing to farm.

Purpose of the Survey

The Area II study constitutes one distinct segment of a statewide survey of nonfarm agriculture. Each supervisory area defined by the State Department for Vocational Agricultural Education -- Area I, Area II, Area III and Area IV, and consisting only of rural towns and semi-urban trade centers -- was surveyed.

Publication of survey findings will complete a comprehensive study of the nonfarm agricultural businesses in the state. Data were previously compiled and published concerning the seven Metropolitan areas of Louisiana.

Continuation of the research was made possible by a grant to the University by the Office of Education, U. S. Department of Health, Education and Welfare. The Vocational Education Act of 1963 authorizes federal grants to states to assist them to maintain, extend and improve existing programs of vocational education.

Determination of the occupational opportunities and training needs of youth for nonfarm agricultural jobs in the Northeast -- Area II -- area was the general purpose of this study. The specific objectives were to identify nonfarm agricultural businesses and professional organizations having one or more job titles requiring competence in agricultural subjects; to secure specific qualifications for jobs; and to determine the competencies needed for job entry and advancements in employment.

The general objective was to provide leaders in education in public schools with information concerning present and emerging occupations in agriculture other than farming for which instruction in vocational agriculture is essential and profitable.

Vocational agriculture throughout Louisiana has reached the point where it must strengthen and improve the quality of the program offered to the students in high school if it is to meet current needs.

In order to help determine the changes necessary in high school programs of vocational agriculture it was assumed that the following data were essential:

1. Number of employees in each and all agricultural business firms or organizations, including employee identification according to job title;
2. Competencies needed in agricultural subjects or skills required to gain job entry and for advancements; and
3. Distinguishing characteristics of all job titles such as: salary or wages, entry age, required formal education and experiences, legal restrictions, union regulations, licensing and certification, and description of work performed by workers with a specific job title.

Survey Procedure

All nonfarm agricultural businesses and organizations within the rural and semi-urban towns of Area II were surveyed in this study.

A comprehensive list of agriculturally oriented firms and businesses was developed for each town by the local teacher of vocational agriculture.

The inventory of firms was evaluated and finalized to include those having one or more employees with knowledge or skill in agricultural subjects. Every nonfarm agricultural business and organization in Area II was included. The personal interview technique was used to obtain information from all establishments. A schedule developed in cooperation with The Center for Research and Leadership Development in Vocational and Technical Education at Ohio State University was used in Louisiana for the state-wide study. Vocational agricultural teachers of Area II assisted in conducting the interviews. A total of 480 agricultural businesses provided data for this report.

Treatment of Survey Information

To facilitate an orderly presentation and interpretation of survey information, the data gathered were categorized to include the following:

1. Occupational families,
2. Classification of job titles into levels of employment and training required in agricultural subjects, and
3. Special requirements for job entry.

In order that this study be better coordinated, occupational families were used as adopted by The Center for Research and Leadership Development in Vocational and Technical Education at Ohio State University. The families included in this investigation were as follows: (1) Farm Machinery Sales and Service, (2) Farm Supplies and Equipment, (3) Livestock and Poultry, (4) Crops, Forestry and Soil Conservation, (5) Ornamental Horticulture, (6) Wildlife and Recreation, (7) Farm Service, (8) Agricultural Service.

Total number of employees was determined for each occupational family, plus the current employment having agricultural competencies, including the number of additional employees with competencies in agriculture five years hence.

Job titles were determined for each occupational family with a projection of new job titles for each occupational family. Each job title was also classified according to levels of employment; namely, Professional, Technical, Managerial, Supervisory, Sales, Office, Skilled, Semiskilled and Unskilled.

Data were collected in each occupational family and each level of employment to include: age of entry into occupation, monthly salary, and number of employees having knowledge or skill in each subject matter area -- Animal Science, Plant Science, Agricultural Business Management and Marketing, and Agricultural Mechanics and Automation.

Educational requirements were determined for each job level in each occupational family. Such requirements as educational, residential background, farm experience and continuing education necessary for advancement were also determined.

These data were gathered with the idea of revealing occupational opportunities in nonfarm agriculture in this rural area of Northeast Louisiana known in this study as Area II.

PRESENTATION AND ANALYSIS OF SURVEY INFORMATION

Occupational Families

The 480 businesses and agencies comprising the Area II agricultural complex were classified according to appropriate occupational families. These organizations were fairly well distributed over all of the eight families except Ornamental Horticulture, and Wildlife and Recreation where only a limited number appeared.

A complete classification of the various kinds of firms and agencies is given by occupational family:

Farm Machinery Sales & Service

- Tractor and Implement Company
- Farm Implement Manufacturer
- Cotton Picker Rebuilding Shop
- Equipment Company
- Truck and Tractor Company
- Motor Company

Farm Supplies & Equipment

- Lumber and Supply Company
- Feed and Seed Company
- Farm Supply Company
- Chemical Company
- Hardware Store
- Farm Supply Store
- Motor Supply Company
- Blowpipe Company
- Gin & Mill Supply Company
- Butane Company
- Gas and Oil Company
- Vet's Supply Company
- Spray & Equipment Company
- Grocery Store

Livestock & Poultry

- Meat Packing Company
- Livestock Sales Barn
- Grocery and Market
- Meat Market

Livestock & Poultry (continued)

- Curing Plant
- Slaughter House
- Frozen Food Locker
- Hatchery
- Sausage Company
- Creamery
- Egg Farm

Crops, Forestry & Soil Concervation

- Grain Company
- Cotton Gin Company
- Cotton Company
- Cotton Brokers
- Compress and Warehouse Company
- Grain and Elevator Company
- Seed Cleaning Plant
- Syrup Mill
- Feed Mill
- Seed and Milling Company
- Sawmill
- Produce Association
- Sweet Potato Company
- Canning Company
- Wood Company
- Tree Nursery
- Veneer Company
- Stake Mill
- Craft Shop

Ornamental Horticulture

- Flower Shop
- Horticulture Products Company
- Nursery

Wildlife & Recreation

- Wildlife & Fishery Commission
- Hunting & Fishing Club
- Fish Bait Farm
- City Golf Course
- State Park

Farm Service

- Artificial Breeder's Assoc.
- Farmers Home Administration
- Production Credit Assoc.
- Federal Land Bank
- Flying Service
- Welding Service
- Garage
- Hay Harvesting Company
- School Canning Center
- Land Clearing Company
- Blacksmith
- Repair Shop
- Power and Light Company
- Veterinarian
- Fencing Co.

Farm Service (continued)

- Pest Control
- Small Motor Shop
- Sheet Metal Shop
- Health Unit
- Insurance Company
- Farm Bureau
- Agricultural Realty
- Service Station
- Creosoting Company
- Seeding and Sodding Company
- Saw and Repair company
- Machine Works
- Dragline and Bulldozer Service
- Cabinet Shop
- Concrete Company
- Plumbing and Heating

Agricultural Service

- Cooperative Extension Service
- Vocational Agricultural Depts.
- Soil Conservation Districts
- Agricultural Stabilization & Conservation Service
- Bank
- State Department of Agriculture
- Experimental Station
- School of Agriculture and Forestry

In Table I the businesses or firms in Area II were categorized into eight occupational families. Nearly 78 per cent of the 480 firms or businesses are in four occupational families: Crops, Forestry and Soil Conservation; Farm Supplies and Equipment; Agricultural Service; and Farm Service. Firms in the Livestock and Poultry Industries, and Farm Machinery Sales and Services make up 17.5 per cent, with Wildlife and Recreation and Ornamental Horticulture making up the remaining 4.8 per cent.

TABLE I

NUMBER OF AGRICULTURAL BUSINESSES, INDUSTRIES, AND AGENCIES GROUPED BY OCCUPATIONAL FAMILY, 1965

Occupational Family	Number	Per Cent
Farm Machinery Sales & Service	35	7.3
Farm Supplies & Equipment	94	19.6
Livestock & Poultry	49	10.2
Crops, Forestry & Soil Conservation	98	20.4
Ornamental Horticulture	11	2.3
Wildlife & Recreation	12	2.5
Farm Service	87	18.1
Agricultural Service	94	19.6
Total	480	100.0

The rank of occupational families according to number of establishments was as follows:

Crops, Forestry & Soil Conservation
Farm Supplies & Equipment
Agricultural Service
Farm Service Occupations
Livestock & Poultry
Farm Machinery Sales & Service
Wildlife & Recreation
Ornamental Horticulture

Number Employed in Nonfarm Agriculture

The number of workers employed in the 480 firms and agencies surveyed, together with those having competencies in agriculture, is shown by occupational family in Table II.

TABLE II

NUMBER OF PERSONS EMPLOYED IN AGRICULTURAL BUSINESSES, INDUSTRIES AND AGENCIES, AND NUMBER OF EMPLOYEES NEEDING AGRICULTURAL COMPETENCIES, BY OCCUPATIONAL FAMILY

Occupational Family	Total Number of Employees	Employees Needing Agricultural Competencies			
		Current Employment	Per Cent Current Employees Needing Agri. Competencies	Expected Employment Five Years Hence	Per Cent Increase Five Years Hence
Farm Machinery Sales and Service	451	402	89.1	496	23.3
Farm Supplies and Equipment	550	460	83.6	540	17.3
Livestock and Poultry	458	347	75.8	364	4.8
Crops, Forestry and Soil Conservation	3,623	1,086	30.0	1,182	8.8
Ornamental Horticulture	39	33	84.6	38	15.1
Wildlife and Recreation	57	48	84.2	62	29.1
Farm Service	352	289	82.1	325	12.4
Agricultural Service	557	454	81.5	500	10.0
Total	6,087	3,119	51.2	3,507	12.4

These data show that 6,087 workers were employed in the 480 agricultural businesses, with some 3,119 required to have knowledge or skills in agricultural subjects. This latter figure represented 51.2 per cent of the total workers in nonfarm agricultural businesses surveyed in this area.

Nearly 60 per cent of those currently employed were in Crops, Forestry and Soil Conservation. Generally, these businesses are those engaged in processing of crops. Less than two per cent of those actively employed were in Wildlife and Recreation and Ornamental Horticulture.

Expected employment of individuals with agricultural competencies five years hence is expected to increase by some 388 employees or 12.5 per cent. The most significant increase, 23.3 per cent, is noted in Farm Machinery Sales and Service. Occupational families ranked according to numbers employed having agricultural competencies are as follows:

Crops, Forestry & Soil Conservation
Farm Supplies & Equipment
Agricultural Service
Farm Machinery Sales & Service
Livestock & Poultry
Farm Service Occupation
Wildlife & Recreation
Ornamental Horticulture

With reference to individuals having competencies in agriculture, only one of the eight families, Livestock and Poultry, was expected to increase less than five per cent in employment five years hence.

Job Titles According to Occupational Families and Level of Employment

The 3,119 individuals currently employed in 480 agricultural businesses in Area II were found in 597 different job titles. An increase of 77 job titles in expected five years hence (12.8 per cent).

Data in Table III indicate that 48.7 per cent of the job titles were concentrated in two occupational families, namely, Crops, Forestry and Soil Conservation, and Farm Supplies and Equipment. Only 5.6 per cent of the job titles were found in Ornamental Horticulture, and Wildlife and Recreation.

TABLE III

NUMBER OF JOB TITLES IN AGRICULTURAL OCCUPATIONS OTHER THAN FARMING,BY OCCUPATIONAL FAMILIES

Occupational Family	Number of Job Titles	Number of Job Titles Five Years Hence	Per Cent Job Title Increase Five Years Hence
Farm Machinery Sales & Service	52	69	32.6
Farm Supplies & Equipment	106	136	28.3
Livestock & Poultry	60	62	3.3
Crops, Forestry & Soil Conservation	185	192	5.4
Ornamental Horticulture	10	10	0.0
Wildlife & Recreation	24	24	0.0
Farm Service	78	87	11.5
Agricultural Service	82	94	14.6
Total	597	674	12.8

Job titles in Ornamental Horticulture, and Wildlife and Recreation were not expected to increase in number during the next five years.

Levels of Employment in Nonfarm Agriculture

Table IV shows the total employees with agricultural training by levels of employment in each occupational family.

A review of the levels of employment frequencies in all occupational families indicates their relative ranking:

Semiskilled
Skilled
Managerial
Unskilled
Office
Professional
Sales
Supervisory
Technical

This study emphasizes the large numbers of persons who are employed at the semiskilled and skilled levels of employment. Nearly 42 per cent of all employees were in these two levels.

Farm Supplies and Equipment had the largest number of employees in sales and managerial level of employment; Crops, Forestry and Soil Conservation, the largest number in supervisory, semiskilled and unskilled; Farm Machinery Sales and Service the largest number in skilled; Agricultural Service the largest number in professional; and Farm Service the largest number in technical level of employment.

Employment at the professional level was restricted primarily to Agricultural Service, Farm Service, Farm Supplies and Equipment, and Crops, Forestry and Soil Conservation. Nearly 72 per cent of all professional workers were in Agricultural Service. A large number of college trained persons are required to provide the services in this occupational family.

TABLE IV

TOTAL EMPLOYEES WITH AGRICULTURAL TRAINING, BY LEVELS OF EMPLOYMENT IN OCCUPATIONAL FAMILIES

Occupational Family	Levels of Employment										
	Prof.	Tech.	Managerial	Supervisory	Sales	Office	Skilled	Semi-skilled	Un-skilled	Total	Per Cent
Farm Machinery Sales & Service	0	0	90	23	35	19	181	53	1	402	12.9
Farm Supplies & Equipment	12	5	131	16	81	54	30	96	35	460	14.8
Livestock & Poultry	0	10	69	6	36	19	56	146	5	347	11.1
Crops, Forestry & Soil Conservation	35	20	101	55	14	79	167	319	296	1,086	34.8
Ornamental Horticulture	0	0	13	0	7	0	0	5	8	33	1.1
Wildlife & Recreation	1	1	7	10	0	1	3	8	17	48	1.5
Farm Service	11	38	58	17	4	31	59	39	32	289	9.3
Agricultural Service	148	26	28	20	0	95	67	67	3	454	14.5
Total	207	100	497	147	177	298	563	733	397	3,119	100.0
Per Cent	6.6	3.2	15.9	4.7	5.7	9.6	18.0	23.6	12.7	100.0	

Nearly 75 per cent of all unskilled workers were found in Crops, Forestry and Soil Conservation. Seasonal employment, along with nature of work, accounts for this large number of unskilled employees.

Job Entry Age of Nonfarm Agricultural Workers

The ages of the 3,119 employees having competencies in agriculture were found by occupational family and level of employment. Ages were designated as present, minimum and maximum for job entry.

Tables V-1 through V-8 give the average age of entry into nonfarm agricultural occupations for each level of employment and each occupational family.

The average minimum job entry age at all levels of employment was 23 years. The average minimum job entry age for each level of employment was as follows: 20 years for unskilled, 21 for semiskilled and clerical, 22 for skilled and sales, 24 for technical and professional and 26 for supervisory and managerial.

The average age of all employees was 36; while prospective employees past the age of 49 (the average for maximum entry) appeared to have little opportunity to begin their employment in agricultural occupations.

Secondary school students and others less than 23 years of age would find it difficult to gain entry into the higher level of employment; however, individuals willing to prepare themselves for specific occupations could well enhance their opportunities for earlier employment at these levels. Business representatives clearly indicated that youth less than 23 years of age usually do not possess salable skills which are of value to them in a growing, competitive business.

TABLE V-1

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURAL OCCUPATIONS, BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

FARM MACHINERY SALES AND SERVICE

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	0	0	0	0
Technical	38	25	50	1
Managerial	39	27	51	72
Supervisory	37	29	49	20
Sales	35	23	51	21
Office	33	21	45	18
Skilled	34	20	47	49
Semiskilled	32	20	46	23
Unskilled	46	18	50	1

TABLE V-2

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURAL OCCUPATIONS, BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

FARM SUPPLIES AND EQUIPMENT

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	26	21	58	2
Technical	36	29	46	4
Managerial	40	26	49	118
Supervisory	39	28	48	15
Sales	36	22	48	42
Office	35	21	46	37
Skilled	34	21	45	18
Semiskilled	32	22	44	34
Unskilled	33	19	46	17

TABLE V-3

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURAL OCCUPATIONS,BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

LIVESTOCK AND POULTRY

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	0	0	0	0
Technical	44	22	57	7
Managerial	39	25	52	58
Supervisory	35	24	52	6
Sales	33	21	53	18
Office	37	23	55	12
Skilled	35	21	51	27
Semiskilled	32	20	53	31
Unskilled	33	26	50	3

TABLE V-4

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURAL OCCUPATIONS,BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

CROPS, FORESTRY AND SOIL CONSERVATION

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	36	26	48	28
Technical	35	23	51	7
Managerial	40	27	51	88
Supervisory	40	29	50	42
Sales	35	23	49	10
Office	36	23	47	47
Skilled	37	24	50	90
Semiskilled	33	22	47	95
Unskilled	34	20	48	38

TABLE V-5

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURAL OCCUPATIONS, BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

ORNAMENTAL HORTICULTURE

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	0	0	0	0
Technical	0	0	0	0
Managerial	39	26	52	11
Supervisory	0	0	0	0
Sales	40	18	60	3
Office	0	0	0	0
Skilled	0	0	0	0
Semiskilled	29	18	49	4
Unskilled	33	19	52	3

TABLE V-6

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURAL OCCUPATIONS, BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

WILDLIFE AND RECREATION

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	46	25	50	2
Technical	42	25	40	1
Managerial	36	24	56	6
Supervisory	40	27	53	9
Sales	0	0	0	0
Office	30	25	50	1
Skilled	35	25	50	2
Semiskilled	36	23	51	5
Unskilled	36	24	52	6

TABLE V-7

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURAL OCCUPATIONS, BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

FARM SERVICE

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	41	22	44	10
Technical	32	21	46	21
Managerial	40	26	52	52
Supervisory	42	24	50	13
Sales	37	22	52	4
Office	38	21	50	22
Skilled	37	21	49	28
Semiskilled	33	19	48	19
Unskilled	30	19	49	12

TABLE V-8

AVERAGE PRESENT, MINIMUM AND MAXIMUM AGE OF ENTRY INTO OFF-THE-FARM AGRICULTURAL OCCUPATIONS, BY OCCUPATIONAL FAMILY AND LEVEL OF EMPLOYMENT

AGRICULTURAL SERVICE

Level of Employment	Present	Minimum	Maximum	Number of Job Titles
Professional	39	25	49	105
Technical	38	21	46	16
Managerial	45	30	51	28
Supervisory	42	24	48	16
Sales	0	0	0	0
Office	33	22	46	55
Skilled	32	19	48	11
Semiskilled	35	20	47	8
Unskilled	23	17	31	3

Educators could develop training programs in keeping with the occupational needs of the businesses allied to agriculture in this area of the state and prepare youth for job entry after completion of their formal secondary school program of studies.

Salaries of Workers Employed in Nonfarm Agriculture

Median monthly salaries of employees in the agricultural businesses in Area II were calculated for each occupational family and for the nine levels of employment. Median salaries were calculated for beginning, present and maximum monthly salaries.

Tables VI-1 through VI-8 give these data for the 480 businesses and 3,119 workers in this study.

The median monthly beginning salary for the skilled worker was from $100 to $350 higher than the unskilled individual; the unskilled worker did not make as impressive a gain in salary level with the increase of tenure on the job as did the skilled worker. Beginning salaries for the unskilled worker were more frequently under $200 monthly.

Managerial and supervisory positions in Farm Machinery Sales and Service reveal beginning salaries in excess of $400 monthly, with significant increases as tenure and experience is acquired. The professional level of employment offered a higher beginning salary than any other level. Technical workers also commanded a higher beginning salary with significant step increases as job tenure increased. Skilled positions in Farm Supplies and Equipment and skilled positions in Farm Machinery Sales and Service offered very attractive salaries.

Sales as a level of employment in Farm Machinery Sales and Service, and Livestock and Poultry offered very attractive positions with good beginning salaries and substantial increases with the accumulation of

TABLE VI-1

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING, BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

FARM MACHINERY SALES AND SERVICE

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	$ .00	$ .00	$ .00
Technical	276.00	426.00	576.00
Managerial	393.85	497.15	588.50
Supervisory	417.66	501.00	563.50
Sales	388.50	492.66	688.50
Office	259.33	322.43	381.00
Skilled	270.65	372.15	446.83
Semiskilled	226.00	278.50	311.71
Unskilled	175.00	175.00	175.00

TABLE VI-2

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING, BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

FARM SUPPLIES AND EQUIPMENT

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	$551.00	$601.00	$651.00
Technical	551.00	601.00	651.00
Managerial	366.78	501.00	567.66
Supervisory	363.50	459.33	515.50
Sales	273.22	355.16	417.66
Office	226.00	297.87	354.12
Skilled	282.66	367.66	434.33
Semiskilled	301.00	321.00	366.00
Unskilled	167.30	205.00	240.28

TABLE VI-3

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING, BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

LIVESTOCK AND POULTRY

Professional	$ .00	$ .00	$ .00
Technical	438.50	559.33	676.00
Managerial	351.00	458.14	541.00
Supervisory	351.00	351.00	417.66
Sales	213.50	284.33	331.00
Office	238.50	288.50	334.33
Skilled	263.50	309.33	340.28
Semiskilled	193.06	235.05	276.00
Unskilled	187.50	187.50	226.00

TABLE VI-4

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING, BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

CROPS, FORESTRY AND SOIL CONSERVATION

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	$529.57	$636.71	$716.00
Technical	376.00	413.50	576.00
Managerial	440.28	547.66	619.75
Supervisory	346.00	426.00	492.66
Sales	351.00	451.00	551.00
Office	268.30	326.00	366.62
Skilled	276.00	345.73	413.50
Semiskilled	238.07	296.00	349.33
Unskilled	193.18	239.88	271.83

TABLE VI-5

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING, BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

ORNAMENTAL HORTICULTURE

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	$ .00	$ .00	$ .00
Technical	.00	.00	.00
Managerial	288.50	409.33	444.75
Supervisory	.00	.00	.00
Sales	175.00	213.50	326.00
Office	.00	.00	.00
Skilled	.00	.00	.00
Semiskilled	175.00	183.00	200.00
Unskilled	187.50	226.00	288.50

TABLE VI-6

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING, BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

WILDLIFE AND RECREATION

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	$501.00	$551.00	$601.00
Technical	376.00	426.00	476.00
Managerial	251.00	376.00	451.00
Supervisory	292.00	476.00	513.00
Sales	.00	.00	.00
Office	376.00	426.00	426.00
Skilled	351.00	401.00	451.00
Semiskilled	213.50	276.00	313.50
Unskilled	213.50	251.00	267.00

TABLE VI-7

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING, BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

FARM SERVICE

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	$471.00	551.00	701.00
Technical	513.50	613.50	713.50
Managerial	423.72	541.00	702.85
Supervisory	413.50	526.00	582.25
Sales	251.00	501.00	717.66
Office	301.00	367.66	426.00
Skilled	276.00	413.50	476.00
Semiskilled	204.16	235.29	286.00
Unskilled	200.00	241.00	267.66

TABLE VI-8

MEDIAN MONTHLY SALARY OF OCCUPATIONS OTHER THAN FARMING, BY OCCUPATIONAL FAMILIES AND LEVEL OF EMPLOYMENT

AGRICULTURAL SERVICE

Level of Employment	Median Monthly Salary		
	Beginning	Present	Maximum
Professional	$465.06	$667.25	$712.89
Technical	351.00	434.33	526.00
Managerial	484.33	651.00	714.16
Supervisory	384.33	484.33	526.00
Sales	.00	.00	.00
Office	280.68	387.11	442.66
Skilled	332.35	376.00	442.66
Semiskilled	200.00	226.00	276.00
Unskilled	175.00	175.00	187.50

experience and years of service. Much of this increase in salary is reflected in the individual's ability to increase his sales volume and consequently, increase his total commission on sales. The salary of these workers is limited only by the individual's ability and desire for achievement.

Educational Level Desired of Persons Entering Nonfarm Agricultural Occupations

Table VII indicates the number of employees in each occupational family and the educational level desired for the 3,119 workers in the 480 agricultural businesses in this survey.

These data were similar to that in all other agricultural businesses and industries throughout the state showing the competent business manager or representative was not desirous of employing individuals with less than a high school education. One exception is noted in Crops, Forestry and Soil Conservation where employers would accept 20.8 per cent of the employees with less than a high school education. Most of the work in this occupational family is seasonal and the jobs in reference are semiskilled or unskilled.

A preference for some college was expressed for 8.8 per cent of the total number employed; college completion was desired for 12.4 per cent of those employed.

Only 10.8 per cent of the workers were desired to possess post-high school technical education. A large number of these workers were mechanics and welders in the occupational family Farm Machinery Sales and Service.

Data show that employers desire 51.2 per cent of employees to have at least a high school education with 32 per cent beyond the secondary level. This fact should be motivating to youth in their education beyond high school.

TABLE VII

EDUCATIONAL LEVEL DESIRED OF PERSONS ENTERING AGRICULTURAL OCCUPATIONS OTHER THAN FARMING

Occupational Family	Number of Employees	Number of Employees											
		Less Than High School		High School Graduate		Post H. S. Tech. Educ.		Some College		College Degree		No Preference	
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Farm Machinery Sales & Service	402	8	2.0	247	61.4	80	19.9	39	9.7	24	6.0	4	1.0
Farm Supplies & Equipment	460	33	7.2	280	60.8	47	10.3	59	12.8	40	8.7	1	0.2
Livestock & Poultry	347	21	6.1	213	61.4	22	6.3	23	6.6	24	6.9	44	12.7
Crops, Forestry & Soil Conservation	1,086	226	20.8	533	49.1	76	7.0	32	2.9	74	6.8	145	13.4
Ornamental Horticulture	33	1	3.0	27	81.8	2	6.1	1	3.0	2	6.1	0	0.0
Wildlife & Recreation	48	7	14.6	34	70.7	1	2.1	3	6.3	3	6.3	0	0.0
Farm Service	289	22	7.6	146	50.5	49	17.0	23	8.0	49	16.9	0	0.0
Agricultural Service	454	10	2.2	118	26.0	60	13.2	95	20.0	170	37.5	1	0.2
Total	3,119	328	10.5	1,598	51.2	337	10.8	275	8.8	386	12.4	195	6.3

Farm Service and Agricultural Service required more workers to have a college degree for job entry. Of the total employees in Agricultural Service, 37.5 per cent were required to have a B.S. degree or beyond for job entry.

Agricultural business firms expressed a "no preference" for 6.3 per cent of the employees with regard to educational level desired for employment; however, nearly 75 per cent of this group were in Crops, Forestry and Soil Conservation.

Residential Background Preferred of New Employees

Tables VIII shows the extent that employers expressed a preference for the farm, rural nonfarm and urban reared individuals as new employees. Data were collected for each occupational family with regard to residential background desired for new workers. Employers expressed the desire for the individual with a farm residential background in 54.8 per cent of the cases and only 8.5 per cent for rural nonfarm. No preference was expressed for 36.5 per cent.

It is worthy to note that the urban reared individual was preferred in only .2 of one per cent of the future number in these agricultural businesses; being a rural area would probably account for this.

Farm Experience Preferred of New Employees

Data in Table VIII reveal that 1,709 or 54.8 per cent of the total employees must have a farm residential background. Table IX reveals the type of farm experience desired by this group. It was required that 38.3 per cent have commercial farm experience; 25.3 per cent, non-commercial; while no preference was given for 36.4 per cent.

TABLE VIII

RESIDENTIAL BACKGROUND PREFERRED OF NEW EMPLOYEES

Occupational Family	Number of Employees	Farm		Rural Non-Farm		Urban		No Preference	
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Farm Machinery Sales & Service	402	238	59.2	64	15.9	0	0.0	100	24.9
Farm Supplies & Equipment	460	272	59.1	37	8.1	0	0.0	151	32.8
Livestock & Poultry	347	196	56.5	10	2.9	0	0.0	141	40.6
Crops, Forestry & Soil Conservation	1,086	460	42.4	88	8.1	0	0.0	538	49.5
Ornamental Horticulture	33	9	27.3	2	6.1	0	0.0	22	66.6
Wildlife & Recreation	48	29	60.4	3	6.3	1	2.1	15	31.2
Farm Service	289	192	66.5	14	4.8	5	1.7	78	27.0
Agricultural Service	454	313	68.9	48	10.6	0	0.0	93	20.5
Total	3,119	1,709	54.8	266	8.5	6	0.2	1,138	36.5

TABLE IX

FARM EXPERIENCE PREFERRED OF NEW EMPLOYEES

Occupational Family	Number of Employees	Commercial Farm		Non-Commercial Farm		No Preference	
		No.	Per Cent	No.	Per Cent	No.	Per Cent
Farm Machinery Sales & Service	238	100	42.0	55	23.1	83	34.9
Farm Supplies & Equipment	272	127	46.7	72	26.5	73	26.8
Livestock & Poultry	196	57	29.1	23	11.7	116	59.2
Crops, Forestry & Soil Conservation	460	152	33.1	111	24.1	197	42.8
Ornamental Horticulture	9	7	77.8	2	22.2	0	0.0
Wildlife & Recreation	29	9	31.0	13	44.8	7	24.2
Farm Service	192	65	33.8	42	21.9	85	44.3
Agricultural Service	313	137	43.8	114	36.4	62	19.8
Total	1,709	654	38.3	432	25.3	623	36.4

Information in Table IX reveals that the commercial type of farm experience is somewhat more preferable for new employees; however, employers would probably select individuals from either category without a great deal of reluctance. One would expect that Farm Machinery Sales and Service firms would give preference to the commercial type of farm experience, since the familiarity with heavy equipment is almost a necessity for new employees in this type of work.

Agricultural Subjects With Which Prospective Workers Must Have Knowledge or Skill

Tables X-1 through X-8 identify the agricultural subject area in each occupational family with which employees must be familiar at each level of employment.

Each occupational family and the nine levels of employment structured for this study served as a basis for determining the agricultural subject area with which the individual must be familiar to secure initial employment.

Agriculture was divided into four general areas, namely, (1) Animal Science, (2) Plant Science, (3) Agricultural Business Management and Marketing, and (4) Agricultural Mechanics and Automation. Each subject matter area was further divided into listed competencies and each competency was checked either (1) necessary, (2) desirable, or (3) not necessary.

In calculating the competency index, a numerical value of three was given to competencies checked necessary, two was given when checked desirable and one was given when the competency was checked not necessary. An average competency rating was calculated for each level of employment in each subject matter area.

TABLE X-1

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR, BY OCCUPATIONAL FAMILIES

FARM MACHINERY SALES AND SERVICE

Level of Employment	Number	Average Competency Ratings Animal Science	Plant Science	Agri. Bus. Mangt. & Mkt.	Agri. Mech. & Automation
Professional	0	0	0	0	0
Technical	0	0	0	0	0
Managerial	90	1.399	1.654	2.288	2.303
Supervisory	23	1.037	1.309	1.619	2.325
Sales	35	1.524	1.801	2.167	2.151
Office	19	1.111	1.293	2.194	1.509
Skilled	181	1.105	1.301	1.398	2.190
Semiskilled	53	1.071	1.277	1.326	2.174
Unskilled	1	1.000	1.000	1.000	1.500

Competency Rating Scale:
High (1.8 - 3.0)
Medium (1.4 - 1.7)
Low (1.0 - 1.3)

TABLE X-2

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR,BY OCCUPATIONAL FAMILIES

FARM SUPPLIES AND EQUIPMENT

		Average Competency Ratings			
Level of Employment	Number	Animal Science	Plant Science	Agri. Bus. Mangt. & Mkt.	Agri. Mech. & Automation
Professional	12	1.438	1.727	1.813	1.500
Technical	5	1.469	1.705	1.659	2.625
Managerial	131	1.863	1.824	2.197	1.931
Supervisory	16	1.400	1.758	1.800	2.178
Sales	81	1.711	1.773	1.914	1.833
Office	54	1.297	1.287	1.760	1.414
Skilled	30	1.194	1.323	1.444	2.065
Semiskilled	96	1.125	1.332	1.375	1.804
Unskilled	35	1.154	1.209	1.199	1.471

Competency Rating Scale:
High (1.8 - 3.0)
Medium (1.4 - 1.7)
Low (1.0 - 1.3)

TABLE X-3

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR ,BY OCCUPATIONAL FAMILIES

LIVESTOCK AND POULTRY

Level of Employment	Number	Average Competency Ratings			
		Animal Science	Plant Science	Agri. Bus. Mangt. & Mkt.	Agri. Mech. & Automation
Professional	0	0	0	0	0
Technical	10	2.429	1.065	1.679	1.190
Managerial	69	2.131	1.431	2.287	1.713
Supervisory	6	2.063	1.273	1.667	1.917
Sales	36	1.840	1.157	1.889	1.250
Office	19	1.417	1.038	2.260	1.014
Skilled	56	1.991	1.189	1.583	1.407
Semiskilled	146	1.694	1.170	1.315	1.495
Unskilled	5	1.250	1.000	1.000	1.500

Competency Rating Scale:
High (1.8 - 3.0)
Medium (1.4 - 1.7)
Low (1.0 - 1.3)

TABLE X-4

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR,BY OCCUPATIONAL FAMILIES

CROPS, FORESTRY AND SOIL CONSERVATION

		Average Competency Ratings			
Level of Employment	Number	Animal Science	Plant Science	Agri. Bus. Mangt. & Mkt.	Agri. Mech. & Automation
Professional	35	1.290	2.091	2.121	1.708
Technical	20	1.232	1.779	1.571	1.571
Managerial	101	1.523	1.876	2.411	2.104
Supervisory	55	1.176	1.734	1.833	1.786
Sales	14	1.362	1.818	1.912	1.550
Office	79	1.088	1.350	1.899	1.188
Skilled	167	1.117	1.361	1.325	1.728
Semiskilled	319	1.245	1.391	1.403	1.779
Unskilled	296	1.069	1.299	1.211	1.447

Competency Rating Scale:
High (1.8 - 3.0)
Medium (1.4 - 1.7)
Low (1.0 - 1.3)

TABLE X-5

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR,BY OCCUPATIONAL FAMILIES

ORNAMENTAL HORTICULTURE

Level of Employment	Number	Average Competency Ratings			
		Animal Science	Plant Science	Agri. Bus. Mangt. & Mkt.	Agri. Mech. & Automation
Professional	0	0	0	0	0
Technical	0	0	0	0	0
Managerial	13	1.000	2.339	2.080	1.788
Supervisory	0	0	0	0	0
Sales	7	1.000	1.636	1.792	1.333
Office	0	0	0	0	0
Skilled	0	0	0	0	0
Semiskilled	5	1.000	2.045	1.281	1.250
Unskilled	8	1.000	1.424	1.333	2.222

Competency Rating Scale:
  High (1.8 - 3.0)
  Medium (1.4 - 1.7)
  Low (1.0 - 1.3)

TABLE X-6

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR,BY OCCUPATIONAL FAMILIES

WILDLIFE AND RECREATION

Level of Employment	Number	Average Competency Ratings Animal Science	Plant Science	Agri. Bus. Mangt. & Mkt.	Agri. Mech. & Automation
Professional	1	2.188	2.773	2.250	2.750
Technical	1	1.875	1.727	1.000	1.000
Managerial	7	1.604	1.621	1.542	1.972
Supervisory	10	1.472	1.596	1.319	1.741
Sales	0	0	0	0	0
Office	1	2.000	2.091	2.000	2.500
Skilled	3	1.313	1.636	1.625	2.417
Semiskilled	8	1.325	1.618	1.400	1.833
Unskilled	17	1.271	1.636	1.313	2.139

Competency Rating Scale:
High (1.8 - 3.0)
Medium (1.4 - 1.7)
Low (1.0 - 1.3)

TABLE X-7

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR, BY OCCUPATIONAL FAMILIES

FARM SERVICE

Level of Employment	Number	Average Competency Ratings Animal Science	Plant Science	Agri. Bus. Mangt. & Mkt.	Agri. Mech. & Automation
Professional	11	1.688	1.900	2.212	2.283
Technical	38	1.310	1.654	1.762	1.698
Managerial	58	1.482	1.675	2.012	2.022
Supervisory	17	2.202	2.000	2.394	2.179
Sales	4	1.500	1.750	2.375	2.417
Office	31	1.261	1.343	1.960	1.326
Skilled	59	1.219	1.435	1.482	2.268
Semiskilled	39	1.164	1.364	1.298	1.877
Unskilled	32	1.135	1.227	1.208	1.681

Competency Rating Scale:
High (1.8 - 3.0)
Medium (1.4 - 1.7)
Low (1.0 - 1.3)

TABLE X-8

AGRICULTURAL AREAS WITH WHICH EMPLOYEES MUST BE FAMILIAR, BY OCCUPATIONAL FAMILIES

AGRICULTURAL SERVICE

		Average Competency Ratings			
Level of Employment	Number	Animal Science	Plant Science	Agri. Bus. Mangt. & Mkt.	Agri. Mech. & Automation
Professional	148	2.332	2.316	2.336	2.213
Technical	26	1.586	1.733	1.680	1.771
Managerial	28	1.853	2.026	2.415	2.054
Supervisory	20	1.688	1.938	2.328	1.896
Sales	0	0	0	0	0
Office	95	1.200	1.369	2.055	1.321
Skilled	67	1.057	1.140	1.682	1.470
Semiskilled	67	1.813	1.557	1.391	1.542
Unskilled	3	1.833	1.030	1.000	1.500

Competency Rating Scale:
High (1.8 - 3.0)
Medium (1.4 - 1.7)
Low (1.0 - 1.3)

An average competency rating of 1.000 through 1.399 indicate low rating; 1.400 through 1.799 indicate medium rating and 1.800 through 3.000 indicate the high rating of competency required to secure initial employment.

The greatest need for general familiarity with agricultural subjects was in the managerial, supervisory, sales, and skilled levels of employment. In the professional level of employment, there was also a need for general knowledge and skill in agricultural subjects with a high level in all areas in the occupational family of Agricultural Service.

A general trend exists in some levels of employment in certain occupational families that specialized training in a particular field is more desirable; such as, Livestock and Poultry in the area of Animal Science, and Agricultural Business Management and Marketing. The average competency rating in Agricultural Business Management and Marketing was relatively high in every occupational family and in every level of employment except unskilled, semiskilled, and skilled. Employees at the managerial level and office level of employment were expected to have a concentrated knowledge of Agricultural Business Management and Marketing. This is obvious since most of these individuals must have daily contact with terminology and business procedures which normally occur in any business or industry.

The unskilled worker, generally, was not required to have control at the information level of the four agricultural subject areas surveyed in this study.

At the technical level of employment, one would certainly surmise that those individuals in whatever capacity they performed would be trained for performance in one of the specialized agricultural subject fields, a fact supported by this study.

Continuing Education Required of Employees and Educational Facilities Used

Table XI is concerned with the continuing education required of employees for each occupational family. Employers indicated that this was necessary for employees to advance in occupational status. The kinds of continuing education preferred are tabulated as firms or industry school, on-the-job training, public school adult education, vocational school, and agricultural college.

The greatest concentration of continuing education required of employees in all occupational families was on-the-job training and in the firm or industry school. The vocational school was statistically of some importance in Farm Supplies and Equipment, Farm Machinery Sales and Service, Ornamental Horticulture and in Wildlife and Recreation. Continuing education in an agricultural college was important in Farm Service and Agricultural Service.

The vocational school and agricultural college were mentioned infrequently in all occupational families when compared statistically with the firm or industry school or on-the-job training. Public school adult education was seldom mentioned in this study.

TABLE XI

CONTINUING EDUCATION REQUIRED BY FIRMS TO ADVANCE IN OCCUPATIONS

Occupational Family	Number of Employees	Number of Employees											
		Firm or Industry School		On-the-Job Training		Public School Adult Educ.		Vocational School		Agri. College		None	
		No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent	No.	Per Cent
Farm Machinery Sales & Service	402	276	68.7	355	88.4	2	0.5	38	9.5	6	1.5	1	2.5
Farm Supplies & Equipment	460	207	45.0	405	88.1	29	6.3	72	15.7	44	9.6	23	5.0
Livestock & Poultry	347	124	35.7	255	73.5	26	7.5	30	8.6	28	8.1	68	19.6
Crops, Forestry & Soil Conservation	1,086	338	31.1	918	84.5	27	2.5	36	3.3	74	6.8	65	6.0
Ornamental Horticulture	33	11	33.3	27	81.8	3	9.1	8	24.3	2	6.1	2	6.1
Wildlife & Recreation	48	8	16.7	38	79.2	0	0.0	10	20.8	1	2.1	6	12.5
Farm Service	289	65	22.5	248	85.8	26	9.0	21	7.3	36	12.5	11	3.8
Agricultural Service	454	158	34.8	293	64.5	17	3.8	36	7.9	198	43.6	8	1.8
Total	3,119	1,187	38.0	2,539	81.3	130	4.2	251	8.1	389	12.5	184	5.9

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Presently, it appears that a more favorable climate is emerging for the development of programs in vocational agriculture to train individuals for employment in nonfarm occupations in agriculture. More people today realize that agriculture is no longer as simple as it was at the turn of the century. Scientific and technological developments have ushered in a new agricultural era of tremendous complexity. Much of the traditional work once performed on the farm is now done in towns and cities where numerous and varied divisions of agriculture have developed to process and market the products of the farm. Great numbers of people are needed to service the farmer and a vast army of workers is required to process his products and deliver them to the consumer.

Summary

This study revealed the great impact of agriculture on the total economy of Area II. Production agriculture is the basic industry with many correlated industries, nonfarm agriculture, growing out of it. One group cannot function efficiently without the other. A large segment of the entire economy of Area II is agriculturally oriented. Production agriculture is the backbone of the economy. Cotton and beef cattle are the two major enterprises with soybeans, corn, forage crops, vegetable crops, sweet potatoes, tomatoes, dairy cattle and swine as the leading minor enterprises.

Production agriculture has brought various types of correlated industries to Area II. A wide variety of jobs in nonfarm agriculture are available to rural youth who express a desire to pursue careers in agriculture. The findings of this study will be of value in providing rural youth with information concerning occupational opportunities and training needs for nonfarm agricultural jobs in the Northeast -- Area II -- area.

A summary of the findings in this study is as follows:

1. A total of 480 nonfarm agricultural businesses or firms were surveyed in Area II. They were classified according to appropriate occupational families.
2. Nearly 78 per cent of the firms and businesses are in four occupational families: Crops, Forestry and Soil Conservation; Farm Supplies and Equipment; Agricultural Service; and Farm Service.
3. Firms in the Livestock and Poultry industries, and Farm Machinery Sales and Service make up another 17.5 per cent of the total.
4. A total of 6,087 workers were employed in the 480 agricultural businesses with 3,119 having competencies in agriculture. This latter figure represents 51.2 per cent of the total number employed in agricultural businesses.
5. Nearly 60 per cent of those currently employed were in Crops, Forestry and Soil Conservation.
6. Ornamental Horticulture and Wildlife and Recreation accounted for only two per cent of the agriculturally employed.
7. Employment of individuals with agricultural competencies five years hence is expected to increase by some 388 employees or 12.5 per cent. The most significant increase, 23.3 per cent, is noted in Farm Machinery Sales and Service.
8. The 3,119 individuals currently employed in the 480 agricultural businesses in Area II were found in 597 different job titles. The number of job titles five years hence is expected to increase by 77 or 12.9 per cent.
9. Over 48 per cent of the job titles were concentrated in two occupational families, namely, Crops, Forestry and Soil Conservation, and Farm Supplies and Equipment.
10. Only 5.6 per cent of the job titles were found in Ornamental Horticulture, and Wildlife and Recreation.

11. The level of employment frequencies in all occupational families reveal that more people were employed at the semiskilled level, 23.6 per cent, than any other level of employment. The semiskilled level was followed by skilled, 18 per cent, and managerial with 15.9 per cent. Only 3.2 per cent was employed at the technical level.

12. The average minimum job entry age at all levels of employment was 23 years. The minimum job entry age for each level of employment was as follows: 20 years for unskilled, 21 for semiskilled and clerical, 22 for skilled and sales, 24 for technical and professional and 26 for supervisory and managerial.

13. The present average age of all employees was 36; while prospective employees past the age 49, the average age for maximum entry, appeared to have little opportunity to begin their employment in agricultural occupations.

14. The median monthly beginning salary for the skilled worker was from $100 to $350 higher than the beginning salary for the unskilled individual.

15. Beginning salaries for the unskilled workers were more frequently under $200 monthly.

16. Managerial and supervisory positions in Farm Machinery Sales and Service revealed beginning salaries in excess of $400 monthly, with significant increases with job tenure.

17. Sales as a level of employment in Farm Machinery Sales and Service offered very attractive positions with good beginning salaries and considerable increases in salary with the accumulation of experience and years of service.

18. Skilled positions in Farm Supplies and Equipment and Farm Machinery Sales and Services also offered very attractive salaries.

19. It was desired by business executives that 83.5 per cent of the employees have at least a high school education or beyond. No preference was stated for 6.3 per cent.

20. A preference for some college was expressed for 8.8 per cent of the total number employed; college completion was desired for 12.4 per cent of those employed in agricultural businesses.

21. Of the total employees in Agricultural Service, 37.5 per cent were required to have a B.S. degree, or beyond, for job entry.

22. Employers expressed a desire for the individual with a farm residential background for 54.8 per cent of the total number employed in agricultural businesses in Area II.

23. No preference was expressed for 36.5 per cent; 8.5 per cent was expressed for rural nonfarm; the urban reared individual was preferred in only .2 of one per cent of the future number in these agricultural businesses.

24. It was desired that 38.3 per cent of the workers have commercial farm experience and 25.3 per cent, non-commercial. No preference was given for 36.4 per cent.

25. The greatest need for familiarity with agricultural subjects was in the managerial, supervisory, sales and skilled level of employment.

26. Managers of an agricultural business were expected to be familiar with all areas of agricultural subjects.

27. Employees at the office level of employment were expected to have a concentrated knowledge of agricultural business, management and marketing.

28. Sales personnel in the occupational families of Farm Machinery Sales and Service, Farm Supplies and Equipment, and Livestock and Poultry were expected to have a general knowledge in all agricultural areas.

29. Professional workers were required to have general knowledge and skill in all agricultural subjects, with an exceptionally high rating in all areas in the occupational family of Agricultural Service.

30. The greater concentration of continuing education required of all employees in all occupational families was in the firm or industry school and on-the-job training.

31. The vocational school and agricultural college were mentioned infrequently in all occupational families when compared statistically with the firm or industry school or on-the-job training types of continuing education.

Conclusions

This study of the nonfarm agricultural complex of Area II revealed rather vividly the job opportunities in new fields of agriculture. The host of jobs once available to youth have been eliminated from farm work, but at the same time the application of research findings and automation have resulted in new occupational fields where the number of job opportunities exceed those formerly supplied on the farm.

There is a wide varitey of opportunities in nonfarm agriculture. These will afford farm boys the opportunity to follow career occupations they will enjoy. Through these they will be able to use their special talents and abilities.

Educational requirements for all occupations are increasing and there are few except at the lowest levels for which a high school education is not now specified as desirable. It is also a fact that an increasingly greater proportion of the population is getting at least a high school education.

Occupations are most time consuming activities. It is impossible to separate occupational adjustments from general life adjustments, or occupational satisfaction from satisfaction from life. One is a measure of the other, neither is prior to nor independent of the other, both are indicators of the person in the world. The occupation is the major focus of a persons activities and usually his thoughts.

By identifying the job opportunities and the knowledge needed for these positions, this investigation provided a platform upon which a training program can be launched to include nonfarm agriculture.

The following are among the more pertinent conclusions drawn from this survey:

1. Nonfarm agriculture has made a tremendous impact on the economy of Area II. The 480 businesses employ 6,087 individuals, with some 3,119 of these workers needing competencies in agriculture.
2. Production agriculture and nonfarm agriculture are correlated; one group cannot function efficiently without the other.
3. There is an ever increasing demand for supplies, machinery and service in production agriculture. Workers in these occupations must also be trained.
4. There is much to be desired in the training of individuals seeking their initial employment in nonfarm agriculture.

5. Vocational agriculture in Area II has reached the point where it must strengthen and improve the quality of vocational education offered to students in high school programs if it is to meet the current needs.

6. Educational requirements for all occupations are increasing and there are few except at the lowest levels for which a high school education is not now specified as desirable.

7. Employers are not willing to employ individuals until they have acquired at least a beginning knowledge of the type of work they plan to enter.

8. The skilled individual, including those at the technical, managerial, and supervisory levels of employment maintain a commanding position in establishing the higher beginning salary for employees.

9. Employees are paid salaries commensurate with their training and experiences; those with specific knowledge and skill command the higher salaries.

10. The training program must be extended to include agricultural, social, and business competencies needed in nonfarm agriculture as well as competencies in applied production agriculture. Supervised experiences in a nonfarm business should also be provided.

Recommendations

The data in this investigation give a "new vision" for vocational agriculture in Area II. Today, vocational agricultural instruction at the secondary level should be concerned not only with production agricultural training but also with preparing students to enter into the world of work. This involves knowledge and skills in a host of new occupations allied to production agriculture. Preparing individuals for these fields of endeavor will require adjustments in present programs of instruction so that the vocational and specialized needs of youth are identified and so that an educational program may be provided to meet their needs. Today an individual who possesses a general type of preparation is at a tremendous disadvantage in the labor market. The prospective employee must be trained in some field with a concentration of knowledge and skill of a particular type of work.

In order for the program in vocational agriculture to be effective it must offer a program of instruction and experience in keeping with the general educational needs of youth. There should be specialized emphasis on individual vocational needs in the work world. This can be accomplished by identifying the vocational and specialized requirements of youth and providing an educational program according to their needs. "Trained workers" does not necessarily mean more schooling but it does mean better education -- schooling which prepares a worker to enter employment at an early age and which provides continuous study opportunities for all ages.

This study reveals the tremendous impact that nonfarm agriculture has on the economy of Area II. Production agriculture is becoming more and more dependent upon the "supporting agricultural complex". Great numbers of people are needed to service the farmer and a vast army of workers is required to process products from the farm and to deliver them to the consumer. There are many openings for gainful employment in agriculture today and the outlook is for more of these opportunities.

The following recommendations are offered which in the opinion of the researcher are supported by factual data:

1. Local programs in vocational agriculture should be redirected to include effective training for preparing farm youth in nonfarm agricultural job opportunities found in this area.
2. Occupational information should be provided to help the student get a clear picture of the job situation within the community where he expects to work.
3. Guidance personnel in the secondary schools should assemble all data pertinent to occupational information. They should counsel with students, parents and teachers with the idea of using these data in planning educational programs to meet the needs of the individuals.

4. More opportunities should be provided in the secondary school for the exploration of areas of interest in vocational programs in order that more specific programs may be planned to prepare individuals for gainful employment in nonfarm agriculture.

5. The individual student with guidance, should make an occupational choice early and pursue a training program that will include definite knowledge and skill in required agricultural subjects, in addition to obtaining pre-job work experience. Data reveal local firms hesitate to employ individuals just out of high school without training or experience. To some extent, this accounts for the preferred entry age of 22 for most jobs.

6. Training programs for nonfarm agricultural jobs must include agricultural subject matter pertinent to the occupational family for which training is intended. The training should be based upon the agricultural sciences.

7. Training programs for nonfarm agricultural jobs must include facilities and plans to teach basic farm mechanics in order to train students for semiskilled and skilled jobs. Data reveal that over 42 per cent of all employees in Area II were classified into these two levels of employment.

8. Educators should provide youth with the training necessary to understand business and business principles and how businesses in the community provide goods and services.

9. Specific vocational instruction and training along with the necessary work experience to make this knowledge functional should be provided for the individual student.

10. The necessary resources must be assembled to provide training for individuals in the classroom, shop and on-the-job.

11. The training should prepare for continuing education. Students must be counseled or indoctrinated into plans for pursuing an educational program continuously -- there is no terminal education. Employers stated that continuous education is necessary in most job situations.

12. Education and industry must work together in a cooperative training program. Definite identification of business agencies, job opportunities, and job requirements must be updated in order to plan training programs and place individuals on the job. The school must keep abreast of local employers needs.

13. Every effort should be made by all school personnel to keep students in high school until graduation. It was required by business executives that over 83 per cent of the employees have at least a high school education or beyond.

14. The general educational level of the student was considered of tremendous importance by business representatives in this study. Educational requirements for employment in all occupations are increasing and there are few, except at the lowest levels, for which a high school education is not now specified as required. It is, therefore, necessary that students become familiar with the educational requirements to enter the world of work not only in agricultural occupations but in other pursuits as well.

It is hoped that this study will provide the educational leaders of the public schools of Area II with information concerning present and emerging occupations in agriculture for which instruction in vocational agriculture is essential and profitable.

2

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APPENDIX

APPENDIX A

Louisiana State University
College of Agriculture
Department of Agricultural Education
Baton Rouge, Louisiana

Interviewer ____________________

Date of Interview ____________________

CONFIDENTIAL

Pre-Employment and Continuing Educational Needs of Persons Engaged in Off-the-Farm Agricultural Occupations in Selected Areas of Louisiana

Form I

Firm Number ____________________ Occupational Family ____________________

I. Name of Business or Service ____________________

II. Address ____________________ Town ____________________

III. Person Interviewed ____________________

Position ____________________

IV. Estimated per cent gross income that is agriculturally oriented ________

V. Major agricultural products and/or functions of business or service

____

____

VI. Employees in this business or service (Total Number) ____________________

A. For employees needing competencies in agriculture, complete the following:

	Number of Employees			
	Presently		Five Years Hence	
Existing Job Titles	Full-Time	Part-Time	Full-Time	Part-Time
1.				
2.				
3.				
4.				

Form I (Cont'd)

		Number of Employees			
		Presently		Five Years Hence	
	Existing Job Titles	Full-Time	Part-Time	Full-Time	Part-Time
5.					
6.					
7.					
8.					
B.	Anticipated New Job Titles				
1.					
2.					
3.					
4.					

Fill out a separate Form II for each job title listed above.

Louisiana State University
College of Agriculture
Department of Agricultural Education
Baton Rouge, Louisiana

Interviewer____________________

Date of Interview______________

CONFIDENTIAL

Pre-Employment and Continuing Educational Needs of Persons Engaged in Off-the-Farm Agricultural Occupations in Selected Areas of Louisiana

Form II

Firm Number________Occupational Family________Level of Employment___________

I. Name and Address of Firm____

____

II. Job Title____

III. Number of workers in this Job Title

Full-Time_________________________Part-Time_________________________

IV. Anticipated Number of workers Five Years Hence

Full-Time_________________________Part-Time_________________________

V. Average Age_______Minimum for Entry_______Maximum for Entry__________

VI. Wages or Salary Per Month: (Beginning - Maximum - Present)

1._____150-200 4._____301-350 7._____451-500 10._____601-650

2._____201-250 5._____351-400 8._____501-550 11._____651-700

3._____251-300 6._____401-450 9._____551-600 12._____700 and above

VII. Activities and Duties of Persons with this Job Title (Detail)

____

____

____

____

____

____

VIII. Agricultural competencies with which worker must be familiar to do job

A. Area: Animal Science

Necessary	Desirable	Not Necessary	
_____	_____	_____	1. Breeding Farm Animals
_____	_____	_____	2. Livestock Feeding and Nutrition
_____	_____	_____	3. Sanitation, Disease and Parasite Control
_____	_____	_____	4. Housing and Equipment
_____	_____	_____	5. Management
_____	_____	_____	6. The Dairy Manufacturing Industry
_____	_____	_____	7. Processing

_______ Packing Plants
_______ Creameries
_______ Poultry Processing
_______ Butchering

_____	_____	_____	8. Marketing

_______ Packing Plants
_______ Creameries
_______ Poultry Processing Plants
_______ Livestock Auctions

B. Area: Plant Science

_____	_____	_____	9. Propagation
_____	_____	_____	10. Soils and Fertilization
_____	_____	_____	11. Control of Insects_____ Diseases_____ Weeds_____
_____	_____	_____	12. Management
_____	_____	_____	13. Production of Ornamental Plants
_____	_____	_____	14. Landscaping
_____	_____	_____	15. Ginning
_____	_____	_____	16. Warehousing

B. Area: Plant Science (cont'd)

Necessary	Desirable	Not Necessary	
______	______	_______	17. Processing (food, seed, grain, etc.)
______	______	_______	18. Marketing
______	______	_______	19. Forestry

_______ Establishing a Stand
_______ Hardwood Control
_______ Fire Control
_______ Estimating and Grading
_______ Disease Control
_______ Insect Control
_______ Harvesting
_______ Marketing
_______ Manufacturing
_______ Pulp Wood

C. Area: Agricultural Business Management and Marketing

______	______	_______	20. Records and Accounts, Budgeting and Analysis
______	______	_______	21. Agricultural Financing, Credit and Insurance
______	______	_______	22. Farm Organization and Management
______	______	_______	23. Labor Management
______	______	_______	24. Marketing Problems and Practices
______	______	_______	25. Agricultural Policy
______	______	_______	26. Agricultural and Related Price Analysis
______	______	_______	27. Cooperatives and Business Organizations

D. Area: Agricultural Mechanics and Automation

______	______	_______	28. Farm Power and Machinery
______	______	_______	29. Farm Buildings and Conveniences
______	______	_______	30. Farm Electrification and Processing
______	______	_______	31. Soil and Water Conservation

D. Area: Agricultural Mechanics and Automation (cont'd)

Necessary	Desirable	Not Necessary	
____	____	____	32. Farm Shop (welding, plumbing, etc.)
____	____	____	33. Farm Construction and Maintenance

E. Other Agricultural competencies that are needed for this Job Title ____

____

____

____

IX. Educational Level Desired for Job Titles (Check only one)

____ 1. Less that High School Graduate

____ 2. High School Graduate

____ 3. Post High School Technical Education

____ 4. Some College

____ 5. College Degree (Baccalaureate)

____ 6. Master's Degree

____ 7. Doctor's Degree

____ 8. No Preference

X. Residential Background (Check only one)

____ 1. Farm

____ 2. Rural, nonfarm

____ 3. Urban

____ 4. No Preference

XI. Farm Experience

____ 1. On a commercial farm

____ 2. On a noncommercial farm

____ 3. No Preference

XII. Experience Desired to Enter this Job Title______________________________

____

____

XIII. Limitations on Entering this Job Title

A. Licensing or Certification

_____ 1. Professional

_____ 2. Industrial

_____ 3. Civil Service

B. Labor Law Restrictions______________________________________

____

C. Labor Union Restrictions____________________________________

____

D. Other (specify)____

____

XIV. Education Required to Advance in this Job Title

A. Technical short course or training provided by:

_____ 1. Your firm or the industry as a whole

_____ 2. On-the-job training

_____ 3. Public school (adult education)

_____ 4. A vocational school

_____ 5. An agricultural college

_____ 6. None

APPENDIX B

Following is a list of the towns in Area II which were surveyed.

Columbia
Jonesboro
Ruston
Farmerville
Bastrop
Rayville
Bernice
Delhi
Oak Grove
Lake Providence
Tallulah
Ferriday
Vidalia
Jena
Harrisonburg
Newellton
Winnsboro
Mangham
Pioneer
Forest
Kilbourne
Downsville
Marion
Spearsville
Sicily Island
Jonesville
Gilbert
Baskin

Following is a list of firms and/or industries in Area II which were surveyed

Central Gin Co., Mangham
Gilbert Flower Co., Rayville
Mulhearn Flower Shop, Rayville
Mangham Jitney Jungles, Mangham
Bayou Fishery Co. Inc., Mangham
Wildlife & Fisheries, Mangham
Holly Ridge Hunting & Fishing Lease, Rayville
Delhi Country Club, Delhi
Artificial Breeding Association, Rayville
Farmers Home Administration, Rayville
Tallulah Producers Credit, Rayville
Federal Land Bank, Rayville
Harvesting Hay Co, Mangham
Kootz Garage, Mangham
Tillmans Garage, Mangham
Blanchard's Garage, Mangham
Macon Flying Service, Delhi
Richland State Bank, Rayville
Holly Ridge Flying Service, Rayville
Cooperative Agricultural Extension Service, Rayville
Beouf River Soil Conservation District, Rayville
Tech Agency Assisting Beouf River Soil Cons. Dist., Rayville
Vocational Agriculture Instructors, Rayville
ASCS, Rayville
Womack Tractor & Implement Co., Oak Grove
Norred Truck & Tractor Co., Oak Grove
Whitten Motor Supply, Oak Grove
McKoins Service Station, Pioneer
Rushings Grocery, Pioneer
John O. Nelson Oil Co., Forest
Ruth H. Hudson Esso Distributor, Oak Grove
Barron Farm Supply, Oak Grove
General Gas Corp. Inc.,Oak Grove
Sawyer Seed & Milling Co., Oak Grove
Johnson Robinson Feed & Seed Store, Oak Grove
Forest High School Canning Center, Forest
Vocational Agriculture Department, Oak Grove
Kilbourn High School Canning Center, Kilbourne
May's Locker, Oak Grove
Robinson Grocery & Market, Oak Grove
Vocational Agriculture Department, Forest
Northeast Louisiana Produce Association, Oak Grove
Pioneer Elevator Co., Pioneer
Pioneer Gin Co., Pioneer
C. H. Wactor Gin, Darnell
West Carroll Potato Co., Forest
Helmers Sawmill, Pioneer
Union Compress Co., Oak Grove
Briggs Elevator Co., Oak Grove

H. S. Shoemaker & Son, Rayville
Scott Truck & Tractor, Rayville
Kervin & Ware Tractor Co., Rayville
Scott Truck & Tractor, Delhi
Tibbs Garage, Delhi
Farmers Supply Co, Delhi
Delhi Implement Co., Inc., Delhi
Cochran Tractor Co., Rayville
Delhi Feed & Seed Co., Delhi
Delhi Motor Supply, Delhi
B & W Blowpipe Co., Rayville
G. B. Franklin & Son Store, Rayville
Richland Farmers Coop Assn., Rayville
Sorey Lumber & Supply, Rayville
Peoples Lumber & Supply, Rayville
Rayville Farm Store, Rayville
Rayville Gin & Mill Supply Co., Inc., Rayville
Kidds Hardware Co., Rayville
Nig's Farm Supply, Rayville
Powell's Hardware, Rayville
Planters Seed & Supply Co., Rayville
Coast Stations & Butane Co, Rayville
Gilbert Oil Co, Inc, Rayville
Vet's Supply, Rayville
Bills Feed & Seed, Delhi
TNT Spray & Equipment Inc, Delhi
Red Barn Chemicals Inc, Rayville
A. T. Owens Hardware & Lumber, Rayville
Red Barn Chemicals Inc., Delhi
Richland Parish Farmers Coop, Mangham
Piros Grocery & Market, Mangham
Delhi Livestock Auction, Delhi
Mangham Ice Co., Mangham
Pickett's Grocery, Delhi
Dixie Dandy, Delhi
Barthel Packing Co, Rayville
Stevenson Brothers Slaughter House, Rayville
Pickett Slaughter House, Delhi
La. Cotton Brokers, Inc., Rayville
Jordan Cotton Co., Rayville
Model Gin Co., Rayville
Union Compress & Warehouse Co, Delhi
Carl Earl Gin, Start
Rayville Grain & Elevator Co, Rayville
Terrick, Inc. Delhi
Delhi Gin Co, Delhi
Wheeler Syrup Mill, Mangham
Agricredit Inc., Lake Providence
Vocational Agricultural Instructor, Jonesboro
O. S. Cooper Grocery, Quitman

Briggs Gin Co., Oak Grove
King Pharr Canning Operations, Inc., Oak Grove
Macon Ridge Growers Assn. Inc., Oak Grove
Artificial Breeding Assn., Pioneer
Chickasaw Gin Coop., Oak Grove
Kilpatrick Posion Service, Pioneer
C. W. Traeweek Land Clearing, Pioneer
Johnson-Fisbee Flying Service, Pioneer
Tallulah Loan Co., Pioneer
Millers Blacksmith Shop, Pioneer
Crowe's Repair Shop, Forest
Hudson Repair Shop, Forest
Artificial Breeding Association, Oak Grove
Holly Spray Service, Pioneer
Helmer Land Clearing Service, Pioneer
Oak Grove Esso Service Center, Oak Grove
Robinson Crop Dusting, Oak Grove
Pollards Grocery & Market, Oak Grove
Wactors Gin, Oak Grove
Louisiana Power & Light Co., Oak Grove
Cotton Buyer-James McDade & Son, Oak Grove
Roberts Locker Plant, Oak Grove
Henry Tyson Liming & Land Clearing, Oak Grove
Vocational Agriculture Department, Pioneer
State Department of Agriculture (Livestock Inspector, Harvey Copes), Pioneer
West Carroll National Bank, Oak Grove
Bank of Oak Grove, Oak Grove
State Department of Agriculture (Sweet Potato Inspector, S. Y. Williams) Oak Grove
C. L. Smith, Veterinarian, Oak Grove
Agricultural Extension Service, Oak Grove
ASCS, Oak Grove
Soil Conservation Service, Oak Grove
FHA, Oak Grove
Vocational Agriculture Department, Newellton
North East Louisiana Experimental Station, St. Joseph
Delta Gin Co, Newellton
Tensas State Bank, Newellton
D. R. Avery (DVM), Newellton
O'Neal Butane Propane Service, Newellton
Coit Chevrolet Co., Inc., Newellton
McGhee's Downsville Hatchery, Inc., Downsville
The Farmerville Bank, Farmerville
Bryan Sausage Co. Inc., Downsville
Wade & Smith, Inc., Farmerville
Allen Auto Parts & Bulk Plant Reseller, Farmerville
Wildlife Enforcement Division, Downsville
ASCS, Farmerville
Wilhite's Garage & Small Engine Repair, Downsville

Farmer's Home Administration, Farmerville
Richardson Fencing Co., Downsville
Union Creosoting Co., Farmerville
Ballard's Downsville
Richardson Seeding & Sodding Contractor, Downsville
Vocational Agriculture Teacher, Downsville
McCormick Brothers Feed Mill, Haile
Allen Brothers Feed Mill, Marion
Union Electric Refrigeration Coop., Farmerville
Deans Sausage Co., Farmerville
Marion Wood Co., Marion
Marion Pressure Treating Co., Marion
Louisiana Cooperative Extension Service, Farmerville
Soil Conservation Service, Farmerville
Louisiana Forestry Commission, Spearsville
Smith Saw & Repair Shop, Bernice
Barron's Grocery Store, Spearsville
Spearsville Wood Co. Inc, Spearsville
Bank of Bernice, Bernice
Progressive Ford Tractor Co. Inc, Bernice
C. A. Reed Lumber Co. Inc., Bernice
Vocational Agriculture Instructor, Marion
N. D. Roberts Lumber Co., Columbia
Columbia Farm Supply, Columbia
James Hardware, Columbia
Caldwell Lime District, Hebert
Columbia Tree Nursery, Columbia
Clarks Wood Market, Clarks
Caldwell Parish Canning Center. Columbia
Columbia Gin Co., Columbia
Farmers Home Administration, Columbia
Vocational Agriculture Instructor, Columbia
Caldwell Bank & Trust Co., Columbia
Citizen Progressive Bank, Columbia
Soil Conservation Service, Columbia
ASCS, Columbia
Agricultural Extension Service, Columbia
Federal Crop Insurance Corporation, Hebert
Davis Meat House, Jonesville
Easterling Lumber Co., Jonesville
Three Rivers Gin, Jonesville
Brown Brothers Farm Supply, Jonesville
Farm Bureau Insurance, Jonesville
Delta Welding, Jonesville
Mason's Agricultural Service, Jonesville
Vocational Agriculture Instructor, Enterprise
Catahoula Truck & Tractor, Jonesville
Vocational Agriculture Instructor, Jonesville
Enterprise School Meat Plant, Enterprise
Armstrong Feed & Seed, Jonesville

Farmers Home Administration, Jonesville
Terry's Hardware Store, Harrisonburg
Taylors Amoco Station, Jonesville
Vocational Agriculture Instructor, Book
Jonesville Tractor & Equipment, Jonesville
Womack Tractor Co., Jonesville
W. & M. Welding Shop, Jonesville
Agricultural Extension Service, Harrisonburg
Catahoula National Wildlife Refuge, Jonesville
ASCS, Harrisonburg
Yarbrough Brothers Gin, Sicily Island
Macon Ridge Farmers Association, Sicily Island
Delta Finance Co., Jonesville
Manning Hardware & Supply Co., Jonesville
Don's Metropolitan Life Insurance, Jonesville
Jonesville Building & Supply Co., Jonesville
Wurster Oil Co., Jonesville
Soil Conservation Service, Harrisonberg
Wurster Oil Co., Sicily Island
Catahoula Flying Service, Jonesville
Dr. T. P. Lancaster, Ferriday
United Grain Elevator, Ferriday
Ganey Florist Shop, Ferriday
Davis Brothers Gin, Clayton
Delta Jersey Farm, Calyton
Vidalia Feed & Seed, Vidalia
Brooking Farm Service, Inc., Vidalia
Carpenter Tractor & Dodge Co, Wildsville
International Harvester Equipment Co., Ferriday
Ferriday Farm Equipment Co.,Ferriday
King Feed & Seed Co., Ferriday
General Gas Corp., Ferriday
Lum Brothers Stock Yard, Ferriday
Chile Nitrate Sales Corp., Ferriday
Webb Cotton Buyer, Ferriday
Union Compress & Warehouse Co., Ferriday
Rogers Lumber Co., Ferriday
Louisiana Wildlife & Fisheries, Ferriday
Concordia Bank & Trust Co., Ferriday
Delta Security Bank, Ferriday
Tallulah Production & Credit Assoc., Ferriday
Concordia Electric Coop., Ferriday
Wilson Milling Co., Ferriday
Vocational Agriculture Instructor, Monterey
Jack's Shop, Lake Providence
Lake Providence Flying Service, Inc., Lake Providence
Carroll Elevator; Lake Providence
Gore & Shelton Cotton Co., Lake Providence
Farmers Seed & Feed Co., Lake Providence
Lake Providence Port Elevator, Inc., Lake Providence

Texaco Inc.,Lake Providence
Federal Compress & Warehouse Co., Lake Providence
Nelson Oil Co., Lake Providence
Norred-Dunlap International Corp., Lake Providence
Carroll Machine Works, Lake Providence
Brown Manufacturing & Distributors, Inc., Lake Providence
Alluvial Lands Co. Ltd., Lake Providence
Lake Providence Bank, Lake Providence
Agricultural Extension Service, Lake Providence
Farmers Home Administration, Lake Providence
Fortenberry Oil Co., Lake Providence
Minsky Agricultural Supply, Lake Providence
Howard Gin Co., Lake Providence
Davis Flying Service, Lake Providence
Terral-Norris Seed Co. Inc, Lake Providence
Tallulah Production Credit Association, Lake Providence
Massey Ferguson, Inc., Lake Providence
ASCS, Lake Providence
Federal Land Bank Association, Lake Providence
Deal Motor Co., Lake Providence
Wilson Flying Service, Lake Providence
Warren & Coody, Inc., Lake Providence
Planters Implement Co., Winnsboro
Woods Grocery, Baskin
Winnsboro Farmers Coop, Winnsboro
Gray Slaughter House, Baskin
Deltic Farm & Timber Co., Baskin
Hilbon-Folds Hydroponics, Baskin
McBroom Pulpwood, Baskin
Baskin Gin Company, Baskin
Department of Wildlife & Fisheries, Baskin
E. L. Fife-Welding, Baskin
Looney Dragline & Bulldozer Service, Baskin
Odom Cabinet Shop, Winnsboro
ASCS, Winnsboro
Vocational Agriculture Instructor, Baskin
Louisiana Forestry Commission District, Winnsboro
Northeast Conservation District, SCS, Winnsboro
Tractor & Farm Supply Inc., Winnsboro
Hammond Drug Store, Gilbert
Vocational Agriculture Instructor, Gilbert
Winnsboro State Bank, Gilbert
Arnold's Welding Shop, Gilbert
Johnson's Feed Mill, Chase
Farmers Gin Inc., Gilbert
USDA GMS, Cotton Division, Winnsboro
Dr. L. L. Knight & Dr. George Gownce, Veterinarian Clinic, Winnsboro
Winnsboro Seed & Supply, Winnsboro
Turner's General Merchandise, Gilbert
Northeast Louisiana Experiment Station, Macon Ridge Branch, Winnsboro
McLemore's Farm Store, Winnsboro
Vocational Agriculture Instructor, Winnsboro
Nelson Tractor Co., Winnsboro

Franklin Parish Cooperative Extension Service, Winnsboro
Black's Gin, Central
Vocational Agriculture Instructor, Central
Donnell's Gin #2, Central
Red Barn Chemical Co., Winnsboro
Jonesboro Veterinary Clinic, Jonesboro
McMoy Well Company, Jonesboro
Shankles Horticulture Products Co, Jonesboro
Soil Conservation Service, Jonesboro
ASCS, Jonesboro
Farmers Home Administration, Jonesboro
Roller Wholesale Meats, Jonesboro
Watson Wholesale Meat Co., Jonesboro
Hurst Dairy--Independence Dist. (Borden Dairy Products), Jonesboro
Swanner's Grocery, Jonesboro
McBride's Grocery and Station, Jonesboro
Shankles Seed & Garden Center, Jonesboro
Kilpatrick Ford, Inc., Jonesboro
Vocational Agriculture Instructor, Jonesboro
Louisiana Veneer Co. Inc., Chatham
Peoples Bank, Chatham
Flanagan Grocery & Market, Chatham
Breedlove's, Inc., Chatham
W. H. Malone General Merchandise, Chatham
Olin Mathieson (Forestry Dept.), Chatham
General Gas Division, Tuloma, Jonesboro
Jonesboro Concrete Co. Inc., Jonesboro
Rowe's Plumbing & Heating, Jonesboro
Louisiana Forestry Commission, Jonesboro
H. D. Heflin Grocery & Market, Jonesboro
Dixie Dandy No. I, Inc., Jonesboro
Maxwell Motors, Inc., Jonesboro
Emmett Rogers Machine Shop, Jonesboro
Swanner Grocery, Jonesboro
Adams Pulp Wood, Quitman
Lowes Stake Mill, Quitman
Adams Grocery, Quitman
McConathy's Grocery, Quitman
Nolan Trading Post, Quitman
Smith's Green House, Quitman
Lowes Craft Shop, Quitman
Brook Brothers Repair, Quitman
Denton Pest Control, Quitman
Denton's Small Motor Shop, Quitman
Lynd's Grocery, Quitman
Jonesboro Gin Co., Jonesboro
Pine Ridge Farm, Eros
Eros Egg Farm, Eros
Frasier's Store, Eros
Agricultural Extension Service, Jonesboro
Vocational Agriculture Instructor, Eros

Carraway Gift & Flower Shop, Jena
Celda's Flower Shop, Jena
Jitney Jungle, Jena
Soil Conservation Service, Jena
Agricultural Extension Service, Jena
ASCS, Jena
Vocational Agriculture Instructor, Jena
Mitcheles Grocery, Goodpine
Cooper Slaughter House, Trout
LaSalle Meat Packing Plant, Jena
Ferguson Packing Co., Jena
Jena Feed, Jena
Carraway & McDougal Lumber Co., Jena
Bodcaw Forestry Department, Goodpine
Denton's Lumber Co., Jena
International Wood Yard, Olla
Olla Auto Parts & Saw Co., Olla
Tremount Lumber District Office, Tullas
Maxwells Nursery & Day Lily Garden, Olla
C. L. McDougal -- Pulpwood, Olla
Price Welding Service, Olla
Louisiana Forestry Commission, District 3, Olla
Babcock's Grocery, Olla
Harris Grocery, Olla
Mac's Super Market, Olla
Vocational Agriculture Instructor, Olla
Urania Lumber, Urania
Jewel Flower Shop, Olla
H & K Industries,Broom Handles, Olla
La Salle Wood Co., Olla
Urania Lumber Co. Ltd., Urania
Dairy Herd Imp. Assn, Monroe
Calhoun Food Preservation Lab., Calhoun
Chemin-A-Haut State Park, Bastrop
Bastrop Feed & Seed Store, Bastrop
Bastrop Livestock Auction, Bastrop
Farmers Home Administration, Bastrop
Stevenson's Sheet Metal Works, Bastrop
Soil Conservation Service, Bastrop
Producers Gin, Collinston
Piper Aero Service, Inc., Collinston
Scott Truck & Tractor, Bastrop
Kunze-Gamble Feed & Seed, Bastrop
Green Brothers Dairy, Inc., Bastrop
H. O. Berry Meat Packing Co., Bastrop
Kunze-Gamble Egg Farm, Bastrop
Barnett Market, Bastrop
International Paper Mill Woodlands Dept, Bastrop
Hall Nursery, Bastrop
City Parks and Recreation, Bastrop
Morehouse Parish Health Unit, Bastrop
Wildlife and Recreation, Collinston

Bastrop Veterinarian Clinic, Bastrop
Agricultural Extension Service, Bastrop
T. A. Leonard, DVM, Bastrop
Harold McClendon Gin, Bastrop
Harold McClendon Grain Elevator & Fertilizer, Bastrop
Ed Green Packing House, Bastrop
Robinson's Nursery, Bastrop
Sander's Sawmill, Choudrant
Aswells Service Station, Choudrant
Whitmans General Store, Choudrant
Choudrant Food Preservation Center, Choudrant
Ford's Garage, Choudrant
Boyds Appliance, Choudrant
Parnell's Gin, Choudrant
Hinton's Feed & Seed, Ruston
Grade A Feed Inc., Ruston
Ruston Hardware, Ruston
Ruston Lumber Co., Ruston
North Louisiana Jersey Breeders, Ruston
Vocational Agriculture Teacher, Ruston
Stiles Animal Clinic, Ruston
Louisiana Agriculture Extension Service, Ruston
School Agriculture & Forestry, Louisiana Tech, Ruston
Tatom & Sons Orchard, Dubach
Harris Green Pulp Yard, Dubach
Enloe Insurance Co., Dubach
Dubach State Bank, Dubach
Louisiana Power and Light Co., Dubach
Smith Pharmacy, Dubach
Henry & Co., Dubach
Fuller Butane, Dubach
Delta Seeds Delinting, Co., Tallulah
Paymasters Oil Mill & Gin, Tallulah
Folk Equipment Co., Inc., Tallulah
Madison Tensas Tractor Co, Tallulah
Farm Air Service, Tallulah
Omega Flying Service, Tallulah
Gore & Shelton Cotton, Co., Tallulah
Staple Cotton Coop. Assn., Tallulah
Bill Gettis Flying Service, Tallulah
Waverly Elevator, Waverly
Waverly Gin, Waverly
Federal Crop Insurance Coop. (USDA), Tallulah
Madison Parish Farm Bureau, Tallulah
Madison Fertilizer Inc., Tallulah
Madison Grain Co, Tallulah
Chicago Mill & Lumber Co., Tallulah
James R. Garrett Agricultural Realty, Tallulah
Loe Equipment Co. Inc., Tallulah
Crawford Feed & Seed, Inc., Tallulah
Tallulah Locker Plant, Tallulah
C. & L. Packing Co., Tallulah
Madison Grain, Tallulah

Tallulah Production Credit Association, Tallulah
Farmers Home Administration, Tallulah
State Farm Insurance, Tallulah
USDA: Plant Pest Control, Tallulah
Entomology Research Division Cotton Insect Section, (USDA), Tallulah
Soil Conservation Service, Tallulah
ASCS (Madison Parish), Tallulah
Madison Animal Hospital, Tallulah
Agricultural Extension Service, Tallulah
Vocational Agriculture Instructor, Tallulah
Graves Flying Service, Tallulah
Yerger Implement Co. Inc., Tallulah
Tallulah Elevator & Feed Co, Tallulah
Tallulah Feed and Seed Store, Tallulah
Allis Chalmers Tractors, Tallulah
Federal Compress, Tallulah

APPENDIX C

The following is a list of the job titles in each of the eight non-farm agricultural occupational families, including the number of workers found in each job title.

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Farm Machinery Sales & Service	Professional	
	Total Professional	0
	Technical	
	Total Technical	0
	Managerial	
	General Manager	9
	Sales Manager	5
	Parts Manager	14
	Service Manager	9
	Manager	13
	Office Manager	4
	Asst. Manager	2
	Asst. Parts Manager	2
	Credit Manager	1
	Owner, Manager, Salesman	21
	Owner	1
	Owner, Manager	3
	Warehouse Manager	3
	Asst. Warehouse Manager	1
	Store Manager & Shop Foreman	1
	Asst. Manager & Salesman	1
	Total Managerial	90
	Supervisory	
	Foreman Repairs	1
	Shop Foreman	14
	Parts Foreman	1
	Foreman-New Equipment	1
	Foreman Warehouse & Assembly	2
	Shop Superintendent	1
	Plant Production Foreman	2
	Shop Supervisor	1
	Total Supervisory	23
	Sales	
	Salesman	29
	Parts Salesman	3
	Farm Equipment Salesman	1
	Outside Salesman	1
	Shipping and Receiving Clerk	1
	Total Sales	35

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS	
Farm Machinery Sales & Service (cont.)	Office		
	Clerk	1	
	Bookkeeper	9	
	Posting Clerk	1	
	Office Secretary	4	
	Office Helper	1	
	Bookkeeper & Asst. Mgr.	1	
	Office Clerk	2	
	Total Office		19
	Skilled		
	Mechanics	134	
	Serviceman	6	
	Parts Man	15	
	Welder	12	
	Welder Repairman	6	
	Painter	1	
	Cotton Picker Mechanic	5	
	Asst. Partsman	2	
	Total Skilled.		181
	Semiskilled		
	Truck Driver	6	
	Mechanic Helper	12	
	Warehouseman	5	
	Assemblyman	21	
	Shop Worker	2	
	Welders Helper	5	
	Laborer & Assemblyman	2	
	Total Semiskilled.		53
	Unskilled		
	Porter	1	
	Total Unskilled.		1
Total Farm Machinery Sales and Service			402
Farm Supplies & Equipment	Professional		
	Pharmacist	1	
	Entomologist	11	
	Total Professional		12
	Technical		
	Chief Designer Engineer	1	
	Mechanical Engineer	2	
	Gin Electrician	1	
	Field Technician	1	
	Total Technical.		5

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Farm Supplies & Equipment (cont.)	Managerial	
	Manager	59
	Store Manager	3
	General Manager	6
	Plumbing & Welding Dept. Mgr.	1
	Asst. Parts Mgr.	1
	President	3
	Secretary-Treasurer	1
	Service Manager	1
	Plant Manager	1
	Manager-Owner	23
	Asst. Manager	10
	Sales Manager	1
	Office Manager	2
	Produce Manager	1
	Warehouse Manager	1
	General Manager, Co-Owner	1
	Store Manager, Yard Foreman	1
	Manager, Co-Owner, Clerk	2
	Asst. Mgr., Co-Owner, Clerk	1
	Office & Warehouse Mgr.	1
	Owner Mgr. Cotton Buyer	1
	Co-Manager	2
	Poultry Operator Mgr.	2
	Station Manager	2
	Paint Dept. Mgr.	1
	Credit Manager	1
	Farm Advertising Mgr.	1
	Owner-Operator	1
	Total Managerial	131
	Supervisory	
	Fertilizer Supt.	2
	Mill Foreman	1
	Warehouse Supt.	1
	Shop Foreman	1
	Plant Supervisor	1
	Yard Foreman	1
	Warehouse Foreman	1
	Gin Repair Foreman	2
	Carpentry Foreman	1
	Scale Crew Foreman	1
	Station Supervisor	1
	Fertilizer & Lime Supt.	1
	Feed, Seed & Garden Supt.	1
	Tool Dept. Supt.	1
	Total Supervisory.	.16

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS	
Farm Supplies & Equipment (cont.)	Sales		
	Salesman	18	
	Sales Clerk	30	
	Outside Salesman	3	
	Store Clerk	16	
	Sales Representative	2	
	Field Salesman & Service Man	3	
	Commission Agent	1	
	Contact Salesman	1	
	Secretary, Treasurer & Clerk	1	
	Gas Salesman	6	
	Total Sales.		.81
	Office		
	Bookkeeper	24	
	Chief Accountant	2	
	Receiving Clerk	1	
	Secretary Treasurer	1	
	Office Employees	4	
	Secretary	1	
	Clerk	9	
	Store Clerk	1	
	Office Clerk	1	
	Clerk, Bookkeeper	4	
	Clerk, Secretary	3	
	Posting Clerk	2	
	Asst. Manager & Bookkeeper	1	
	Total Sales.		.54
	Skilled		
	Mechanic	7	
	Serviceman	5	
	Farm Service Man	1	
	Mechanic Serviceman	2	
	Sheet Metal Mechanic	1	
	Butcher	2	
	Engine Mechanic (Gin)	1	
	Head Saw Cylinder Filer	1	
	Parts Man	4	
	Tire Recapman	2	
	Small Engine Mechanic	3	
	Saw Mechanic	1	
	Total Skilled.		.30
	Semiskilled		
	Produce Man	1	
	Service Man	5	
	Truck Driver	37	
	Warehouseman	8	
	Sheet Metal Mechanic Helper	5	

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Farm Supplies & Equipment (cont.)	Semiskilled (cont.)	
	Asst. Warehouse & Truck Driver	1
	Electricians Helper	3
	Engine Mechanics Helper	1
	Saw Shop Crewman	2
	Carpenter Crewman	4
	Scale Repair Crewman	3
	Gin Repair Crewman	10
	Butane Serviceman	3
	Butane Transport Driver	2
	Butane Deliveryman	1
	Fertilizer Plant Worker	5
	Maint. Service Man	5
	Total Semiskilled. 96	
	Unskilled	
	Porter	2
	Laborers	19
	Truck Helper	1
	Deliveryman	7
	Service Station Attendant	3
	Stock Boy	3
	Total Unskilled. 35	
Total Farm Supplies and Equipment. 460		
Livestock & Poultry	Professional	
	Total Professional 0	
	Technical	
	Inspector Grader	2
	Lab. Technician	1
	Auctioneer	4
	Ringman	2
	D.H.I.A. Tester	1
	Total Technical. 10	
	Managerial	
	Plant Manager	3
	President	2
	Manager	28
	Asst. Manager	5
	Owner Manager	14
	Asst. Plant Manager	1
	Vice President	1
	Office Manager	1
	General Manager	1
	Produce Manager	6
	Market Manager	1

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Livestock & Poultry (cont.)	Managerial (cont.)	
	Grocery Manager	1
	Store Manager	2
	Manager, Bookkeeper	1
	Hatchery Manager	1
	Owner, Livestock Buyer	1
	Total Managerial 69	
	Supervisory	
	Shipping Foreman	1
	General Supervisor	1
	Foreman	1
	Processing Foreman	1
	Farm Supervisor	2
	Total Supervisory. 6	
	Sales	
	Salesman	17
	Route Salesman	2
	Beef, Lamb & Veal Salesman	4
	Sales Clerk	7
	Routeman	1
	Buyer	2
	Cattle Buyer	1
	Market Clerk	1
	Wholesale Routeman	1
	Total Sales. 36	
	Office	
	Bookkeeper	6
	Shipping Clerk	1
	Office Worker	1
	Clerk	5
	Stenographer, Clerk	3
	Weightmaster, Ticket Writer	3
	Total Office 19	
	Skilled	
	Meat Cutter	17
	Butcher	30
	Slaughter, Butcher	1
	Processor (Dairy)	8
	Total Skilled. 56	
	Semiskilled	
	Maintenance Man	1
	Sausage Maker	3
	Butcher's Helper	3
	Slaughterer	4
	Processor	14
	Truck Driver	12

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Livestock & Poultry (cont.)	Semiskilled (cont.)	
	Weight Master	1
	Meat Wrapper	3
	Stock Man	6
	Egg Room Operator	20
	Sorter & Checker	12
	Egg Processor	4
	Total Semiskilled. 83	
	Unskilled	
	Laborer	63
	Truck Helper	3
	Porter	2
	Total Unskilled. 68	
Total Livestock & Poultry. 347		
Crops, Forestry & Soil Conservation	Professional	
	Service Forester	1
	Asst. Forester	2
	Research Forester	1
	Entomologist	2
	Asst. District Forester	5
	Agri-Commodity Supervisor	1
	District Forester	8
	Forester	9
	Chief Forester	1
	Manager, Forester	3
	Asst. Agri. Commodity Supervisor	1
	Forester Engineer	1
	Total Professional 35	
	Technical	
	Forest Technician	8
	Forest Ranger	1
	Engineer	1
	Cotton Mkt. Spec. Fieldman	1
	Cotton Classer	9
	Total Technical. 20	
	Managerial	
	Manager Agri. Dept.	3
	General Sugar Mill Manager	1
	Asst. Manager	6
	Secretary-Treasurer	3
	President	3
	Business Manager	1
	Forestry Manager	1
	Land Manager	3

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Crops, Forestry & Soil Conservation (cont.)	Managerial (cont.)	
	Manager	43
	Executive Vice-President	2
	General Manager	2
	Plant Manager	3
	Sales Manager	2
	Sec., Treas, Gen. Mgr. & Cotton Buyer	1
	Office Manager & Cotton Buyer	1
	General Manager, Cotton Buyer	3
	Owner, Manager	10
	President, Co-Owner	2
	President, General Manager	1
	Manager, Coordinator	1
	Asst. Manager, Bookkeeper	1
	Secretary, Treasurer & Mgr.	1
	Co-Manager & Co-Owner	4
	Manager Salesman	1
	Manager Operator	1
	Vice President, Land Manager	1
	Total Managerial	101
	Supervisory	
	Creosote Plant Supt. Foreman	9
	Erection Foreman	3
	Wood Yard Foreman	1
	Yard Foreman	4
	Superintendent	4
	Plant Foreman	10
	Wood Procurement Supt.	2
	Gin Superintendent	1
	Repair Shop Foreman	1
	Logging Foreman	1
	Compress Superintendent	3
	Compress Asst. Supt. & Press Foreman	2
	Compress Labor Foreman	3
	Woods Foreman	3
	Mill Foreman	3
	Planer Mill Foreman	1
	Cross Tie Supt.	1
	Asst. Creosote Plant Supt.	1
	Field Foreman	1
	Total Supervisory.	
	Sales	
	Salesman	3
	Buyer	4
	Sales Clerk	1
	Cotton Buyer	4
	Auctioneer	1
	Shed Clerk	1
	Total Sales.	14

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Crops, Forestry & Soil Conservation (cont.)	Office	
	Clerk	17
	Chief Clerk	2
	Shipping Clerk	2
	Secretary-Treasurer	1
	Typist-Clerk	1
	Secretary	2
	Bookkeeper	27
	Check Writer	2
	Grain Checker & Weigher	1
	Shipping Clerk & Bookkeeper	2
	Assistant Shipping Clerk	1
	Clerk Weigher	1
	Shed Clerk	1
	Weigher & Bookkeeper	4
	Ticketman & Cotton Weigher	2
	Recorder Clerk	11
	Bookkeeper & Sample Man	2
	Total Office	79
	Skilled	
	Cabinet Maker	2
	Heavy Equipment Operator	1
	Forest Ranger	2
	Ginner	26
	Press Operator	25
	Trimmer	1
	Mechanic	5
	Gin Operator	8
	Standman	7
	Forest Foreman	6
	Welder	1
	Presser	4
	Edgeman	3
	Millwright	5
	Sawyer	10
	Sheet Metal Mechanic	2
	Box Setter	2
	Weigher	1
	Maintenance Man	3
	Loader Operator & Wood Scaler	1
	Treating Engineer	1
	Loader Operator	5
	Gang Sawyer	1
	Saw Filer	2
	Kiln Operator	1
	Shop Mechanic	1
	Machine Man (Planner Mill)	1
	Machine Feeder	1

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS	
Crops, Forestry & Soil Conservation (cont.)	Skilled (cont.)		
	Lumber Grader	10	
	Lumber Checker	2	
	Sawyer & Filer	2	
	Planner Machine Oper. & Mech.	1	
	Grain Inspector	2	
	Fireman	1	
	Hydrofunic House Worker	1	
	Lather Operator	1	
	Veneer Chipper Operator	8	
	Splicer Operator	3	
	Dry Kiln Operator	2	
	Veneer Breaker	4	
	Gin Mechanic	2	
	Total Skilled.		167
	Semiskilled		
	Forest Fireman	24	
	Maintenance Helper	1	
	Lift Truck Operator	6	
	Log Scaler	4	
	Gin Stand Worker	13	
	Candler	2	
	Truck Driver	35	
	Forest Towerman I	4	
	Tree Trimmer	2	
	Warehouseman	2	
	Tower Man II	1	
	Weigher	10	
	Crew Leader	5	
	Utility Man	1	
	Seed Weigher	2	
	Elevator Operator	13	
	Feed Mill Operator	3	
	Seed Cleaner & Delinter Oper.	4	
	Cane Grinder	1	
	Cane Juice Carrier	1	
	Cane Juice Drainer	1	
	Skimmer	1	
	Syrup Cooker & Fireman	1	
	Pole & Pile Peeler	43	
	Scaler Helper	3	
	Mechanic Helper	6	
	Laborer	13	
	Saw Filer Helper	1	
	Log Lifter	2	
	Debarker Operator	3	
	Fireman	2	
	Press Crew Worker	12	
	Carman	2	

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Crops, Forestry & Soil Conservation (cont.)	Semiskilled (cont.)	
	Laborer Utility	47
	Chipper Operator	2
	Resaw Operator	1
	Commodity Aids	9
	Bench Saw Operator	2
	Plane Operator	1
	Lumber Handler	8
	Cotton Sample Weigher	1
	Edger	2
	Log Tripper	1
	Skidway Man	1
	Peach Packer	20
	Total Semiskilled.	319
	Unskilled	
	Wood Crew	5
	Yardman	10
	Warehouseman	7
	Laborer	220
	Porter	1
	Field Workers	25
	Yard Laborer	1
	Suction Feeder	9
	Feedmill & Grain Elevator Worker	4
	Syrup Mill Worker	1
	Weeder-Grader	12
	Cotton Loader	1
	Total Unskilled.	296
Total Crops, Forestry & Soil Conservation.		1,086
Ornamental Horticulture	Professional	
	Total Professional	0
	Technical	
	Total Technical.	0
	Managerial	
	Manager	6
	Nursery Manager	1
	Nursery Farm Manager	1
	Owner Manager	5
	Total Managerial	13
	Supervisory	
	Total Supervisory.	0

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Ornamental Horticulture (cont.)	Sales	
	Sales Clerk	2
	Designer Salesman	5
	Total Sales	7
	Office	
	Total Office	0
	Skilled	
	Total Skilled	0
	Semiskilled	
	Potter	1
	Florist Helper	4
	Total Semiskilled	5
	Unskilled	
	Laborer	3
	Nursery Helper	5
	Total Unskilled	8
Total Ornamental Horticulture		33
Wildlife & Recreation	Professional	
	Wildlife Biologist	1
	Total Professional	1
	Technical	
	Biologist Aid	1
	Total Technical	1
	Managerial	
	Manager	3
	Asst. Manager	1
	Park Superintendent	1
	Wildlife Manager	1
	Refuge Manager	1
	Total Managerial	7
	Supervisory	
	Park Ranger	2
	Fishery Foreman	2
	Wildlife Agent	2
	Game Warden	1
	Supt. of Parks & Recreation	1
	Park Supervisor	1
	Enforcement Agent	1
	Total Supervisory	10
	Sales	
	Total Sales	0

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS	
Wildlife & Recreation (cont.)	Office		
	Refuse Clerk	1	
	Total Office		1
	Skilled		
	Bulldozer Operator	2	
	Heavy Equipment Operator	1	
	Total Skilled.		3
	Semiskilled		
	Maintenance Man	3	
	Minnow Feeder	1	
	Equipment Operator	1	
	Fish Farm Helper	3	
	Total Semiskilled.		8
	Unskilled		
	Park Attendant	5	
	Laborers	11	
	Seine Man	1	
	Total Unskilled.		17
Total Wildlife and Recreation.			48
Farm Service	Professional		
	County Supervisor	3	
	Home Service Adviser	1	
	Home Service Engineer	1	
	Asst. County Supervisor	4	
	Electrical Engineer	1	
	Dist. Sales Manager	1	
	Total Professional		11
	Technical		
	Artificial Inseminator	3	
	Breeding Technician	1	
	Pilot	30	
	Survey Asst.	2	
	Sanitarian	2	
	Total Technical.		38
	Managerial		
	Manager	19	
	Asst. Manager	3	
	Sales Manager	2	
	Secretary-Treasurer	1	
	District Manager	1	
	Office Manager	1	
	Owner Manager	19	

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Farm Service (cont.)	Managerial (cont.)	
	Plant Manager	1
	Credit Manager	1
	Farm Loan Manager	1
	Manager Pilot	1
	Manager Welder	3
	Manager Mechanic	3
	President Manager	2
	Total Managerial	58
	Supervisory	
	Supervisor	2
	Shop Foreman	1
	Foreman	1
	Line Superintendent	1
	Asst. Shop Foreman	3
	Asst. County Supervisor	4
	Field Representative	4
	Construction Line Foreman	1
	Total Supervisory.	17
	Sales	
	Salesman	1
	Insurance Salesman	1
	Service Agent	2
	Total Sales.	4
	Office	
	Office Clerk	7
	Office Asst.	2
	Secretary	3
	Bookkeeper	1
	Clerk	11
	Clerical Asst.	1
	Office Secretary	1
	Treasurer	2
	Stenographer, Clerk	2
	Accountant I	1
	Total Office	31
	Skilled	
	Operators	14
	Machinest	1
	Blacksmith	4
	Lineman	9
	Machine Operator	2
	Welder	13
	Bulldozer Operator	4
	Construction Lineman	5

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Farm Service (cont.)	Skilled (cont.)	
	Plumer	2
	Dragline Operator	1
	Sheet Metal Mechanic	2
	Appliance Mechanic	1
	Machinist, Welder	1
	Total Skilled	59
	Semiskilled	
	Pest Control Service Man	1
	Fieldman	6
	Painter	1
	Ground Crew	15
	Hay Crewman	3
	Applicator	3
	Tractor Operator	1
	Spreader Operator	1
	Welder Helper	2
	Tree Pruner	2
	Carpenters Helper	1
	Meter Reader	3
	Total Semiskilled	39
	Unskilled	
	Laborer	15
	Lineman Helper	2
	General Helper	7
	Service Assistant	3
	Plumbers Helper	3
	Sheet Metal Helper	2
	Total Unskilled	32
Total Farm Service		289
Agricultural Service	Professional	
	Vocational Agriculture Teacher	35
	Veterinarian	10
	Asst. County Agent	10
	Supervisor	1
	Entomologist	5
	Home Demonstration Agent	8
	Agronomist	1
	Livestock Director	1
	Agri. Engineer	2
	County Office Manager	4
	State Entomologist	4
	County Agent	13
	Assoc. County Agent	7

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS	
Agricultural Service (cont.)	Professional (cont.)		
	Supervisor	5	
	Soil Scientist	1	
	Asst. Home Demonstration Agt.	8	
	Soil Conservationist	3	
	Conservationist	1	
	Assoc. Home Demon. Agent	2	
	Work Unit Conservationist	6	
	Station Supt.	1	
	Assoc. Prof. Agronomy	2	
	Forester Administrator	1	
	Agri. Professor	17	
	Total Professional		148
	Technical		
	Pest Control Technician	2	
	Livestock Insp. General	1	
	Soil Conservation Technician	6	
	Soil Conservation Aid	8	
	Conservation Technician	2	
	Agri. Engineering Aid	6	
	Research Aid	1	
	Total Technical.		26
	Managerial		
	President	5	
	Manager	6	
	Senior Officer	1	
	Senior Vice President	1	
	Asst. Vice President	1	
	Vice President	6	
	County Office Manager	2	
	Dist. Manager	1	
	Manager & Fieldman	1	
	Exec. Vice President	1	
	Branch Manager	1	
	Asst. V. President & Agricultural Representative	1	
	Equipment Manager	1	
	Total Managerial		28
	Supervisory		
	Work Unit Supervisor	1	
	Farm Superintendent	1	
	Supervisor	3	
	Performance Supervisor	5	
	Farm Supervisor	1	
	County Supervisor	1	
	Farm Loan Supervisor	3	
	Asst. County Supervisor	2	
	Farm & Lab. Supt.	3	
	Total Supervisory.		20

OCCUPATIONAL FAMILY	LEVEL OF EMPLOYMENT AND JOB TITLES	NUMBER OF WORKERS
Agricultural Service (cont.)	Sales	
	Total Sales	0
	Office	
	Secretary	5
	Clerk Typist	3
	Note Teller	6
	Program Clerk	11
	Administrative Clerk	1
	Clerk	26
	Asst. Cashier	9
	Chief Clerk	4
	Bookkeeper	12
	County Office Clerk	1
	Cashier	6
	General Clerk	1
	Extension Secretary	4
	Filing Clerk	1
	Cotton Loan Clerk	1
	Performance Clerk	1
	Note Teller & Bookkeeper	3
	Total Office	95
	Skilled	
	Plainometer Operator	7
	Field Reporter	52
	Asst. to Engineers Aid	1
	Farm Mechanic	1
	Heavy Machine Operator	6
	Total Skilled	67
	Semiskilled	
	Veterinarian Helper	2
	Kennel Helper	1
	Farm Laborer	12
	Dairy Laborer	6
	Student Farm Laborer	40
	Research Helper	6
	Total Semiskilled	67
	Unskilled	
	Laborer	1
	Kennel Man	2
	Total Unskilled	3
Total Agricultural Service		454